

LSC Use Only No: LSC Action-Date: 07-16i UWUCC USE Only No. UWUCC Action-Date: AP-10/30/07 Senate Action Date: App-12/4/07

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Charles Shubra	Email Address cjshubra@iup.edu
Proposing Department/Unit Department of Computer Science	Phone 7-7917

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply)
 New Course Course Prefix Change Course Deletion
 Course Revision Course Number and/or Title Change Catalog Description Change

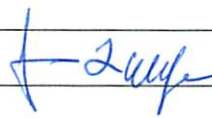
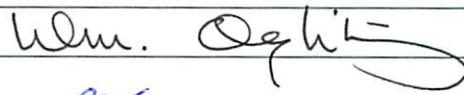
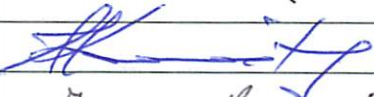
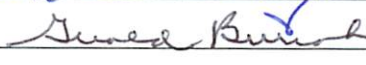
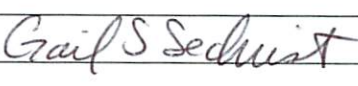
<u>Current</u> Course prefix, number and full title COSC 380 Seminar on the Computer Profession	<u>Proposed</u> course prefix, number and full title, if changing COSC 380 Seminar on the Computer Profession and Ethics
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2. Additional Course Designations: check if appropriate
 This course is also proposed as a Liberal Studies Course. Other: (e.g., Women's Studies, Pan-African)
 This course is also proposed as an Honors College Course.

3. Program Proposals
 New Degree Program Program Title Change Program Revision
 New Minor Program New Track Other

<u>Current</u> program name	<u>Proposed</u> program name, if changing
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4. Approvals

		Date
Department Curriculum Committee Chair(s)		5 Dec 06
Department Chair(s)		12/7/06
College Curriculum Committee Chair		05/17/07
College Dean		9/26/07
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs		10/30/07

* where applicable

Received

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NOV 06 2007

SEP 25 2007

Part-II Description of the Curriculum Change

1. New Syllabus of Record

I. Catalog Description

COSC 380 Seminar on the Computer Profession and Ethics

2c-01-2cr

Prerequisite: Permission of instructor

Reading, review and discussion of the current literature in computer science and industry trade journals; effective oral presentations: employment prospects. Topics on computer ethics and review of case studies on computer ethics from professional journals with discussion of the issues involved. Should be taken the semester before an internship or the first semester of the senior year. Should not be taken at the same time as COSC 480.

II. Course Outcomes

Upon successful completion of this course, the student will be able to:

1. Produce the documents commonly expected to apply for a work position – cover letter, resume and follow up letters.
2. Participate in the professional interviewing process.
3. Identify the sources of and utilize subject content of literature in the computer profession.
4. Utilize the literature in the computer profession to formulate and produce summaries of a topic within the literature.
5. Plan, develop and deliver professional presentations using presentation tools such as Micro Soft PowerPoint.
6. Assess the role of Ethics in the computer profession.
7. Recognize the various key ethical issues surrounding computer technology and computer systems.
8. Evaluate the responsibilities and accountability of computer professionals.

III. Detailed Course Outline

A. Introduction to the Course and Course Objectives	0.5 wk
B. Obtaining a Professional Position	1.0 wk
1. Constructing a Professional Resume – Content, Format and Styles	
2. Constructing a Professional Cover Letter – Content, Format and Styles	
3. Job Interviews - what to expect and what is expected of you	
4. Correspondence Following an Interview	
5. The Offer of Employment	
C. Professional Presentations	1.5 wk
1. Preparation, Planning and Producing a Professional Presentation	
2. Delivering Your First Presentation – Your Professional Goals	
D. Survey of Current and Projected Employment Opportunities	0.5 wk
1. Identifying Employment Opportunities – Where to Look	
2. Job Fairs – What to Expect	
3. Job Descriptions	
4. Compensation – Salary, Benefits, Cost of Living, Work Hours, Working Conditions	
E. Professional Report Presentations and Critiques	2.5 wk
1. Each Student Prepares and Delivers a 15 Minute Presentation	
2. Student Presentations are Critiqued	
F. Topic Exam	0.5 wk

G. Introduction to Computer Ethics 1.0 wk
 1. What is Computer Ethics?
 2. Comparisons between philosophical ethics, professional ethics, and computer ethics

H. Privacy 1.0 wk
 1. Impact of Computer Technology
 2. Consumer Information
 3. Privacy Risks - Identity Theft
 4. Case Study Presentation *

I. Trusting Technology – Who is Accountable? 1.0 wk
 1. What Can Go Wrong
 2. Increasing Reliability
 3. Professional Responsibility and Accountability
 4. Case Study Presentation *

J. Freedom of Speech in Cyberspace 1.0 wk
 1. Offensive Speech
 2. Censorship
 3. Abuses
 4. Case Study Presentation *

K. Intellectual Property 1.0 wk
 1. What is Intellectual Property
 2. Copyright Law
 3. Case Study Presentation *

L. Computer Crime 1.0 wk
 1. Hacking
 2. Online Scams
 3. Fraud, Embezzlement, Sabotage, Forgery
 4. Legislation for Privacy and Access to Information
 5. Case Study Presentation *

M. Impact and Control of Computers 1.0 wk
 1. Computers at Work
 2. Computers and Community
 3. Information Access
 4. Evaluating the Impact of Computer Technology
 5. Case Study Presentation *

N. Professional Ethical Codes and Responsibilities 0.5 wk
 1. Ethical Guidelines for Computer Professionals

* After the faculty member introduces and identifies the critical components of an ethical subject, assigned students will research, organize and deliver presentations of cases involving the specific ethical subject. The each student will submit a 3-5 page paper detailing the issues identified in their case.

Total = 14 weeks

O. Ethics Exam (during finals week) 2 hours

IV. Evaluation Methods:

A. Reading Assignments & Reports

Students will read professional literature in Computer Science and write six reports of the articles that they read. Each report should have as its source a serial publication from the approved list of professional periodicals indicated below. No article may have as its source an excerpt from a book. Use of an article from a computing professional source that is not listed below requires prior approval. Furthermore, all articles must come from journals that have publication dates not more than 18 months earlier than the beginning of the course. Students may also not use a particular periodical source more than once.

The purpose of the reports is to expose students to various sources of trade literature and have them produce an executive summary of the issues involved.

B. Professional Goal Report:

The student will give a free-style but formal presentation in class concerning his/her background and career goals. The report will be about 5 to 7 minutes long.

C. Major Report:

A professional presentation based on a subject appropriate for one of the article reviews or a subject agreed to by the professor.

Students should plan their formal presentation to take about fifteen (15) minutes (they are timed). It is the student's responsibility to assure that the site is prepared for his/her presentation. The presentation must be done with electronic presentation software like Microsoft PowerPoint.

Pre-approved Professional Sources for Articles:

AT&T Technologies	Information World
BYTE	Infoworld
CIO	MacWorld
Communication Week	Network Computing
Computer Technology Review	PC World
Computerworld	Programmer's Paradise
Data Communications	Software
Datamation	Software Development
DEC Professional	Sun World
Dr. Dobb's Journal	Visual Basic Programmers Journal

D. Resume:

Each student will prepare a professional resume for submission in class. They are to be submitted initially to the instructor by week three for review and reaction (comments) and they will be handed back to the instructor for polishing prior to the final submission in week five.

E. Mock Interview:

Student will take part in a Career Services Mock Interview.

F. Guest Lecturers:

There may be one or two guest lectures for our class. Students are expected to show professional behavior during their presentations and accord to them the same respect that is shown to the instructor.

G. Late Work Submission:

Due dates for assignments and all other hand-ins will be specified in class. It is student's responsibility to turn in assignments on their specified due dates. Student's name, the due date and hand-in date should be indicated on each assignment and other hand-ins.

A schedule of lateness penalties will be given to the students on the first day of class.

H. Professional Activities:

Students are required to attend three professional activities during the semester. These include: IUP Computer Science Department sponsored colloquia, Internship Presentations, University sponsored presentations whose subject matter deals with computer technology or issues.

I. The final grade of the course will be determined as follows:

<u>Requirement</u>	<u>Points</u>
Readings	60
Resume (1st. Submit)	10
Resume (2nd. Submit)	25
Cover Letter	15
Prof. Goal Presentation	15
Major Presentation	50
Mock Interview	20
Ethics Case Presentation	50
Ethics Case Paper	50
Attendance/Participation	70
Topics Exam	50
Ethics Final Exam	<u>100</u>
Total	515

V. Example Grading Scale:

The grading scale will be:

90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, and < 60% = F.

You must get a passing point (60% or better) in each activity to obtain an 'A' or a 'B' in this course.

VI. Undergraduate Course Attendance policy:

The attendance policy will conform to the University wide attendance criteria.

VII. Required Textbook, Supplemental Books and Readings:

Baase, Sara, *A Gift of Fire 2nd ed*, Pearson Education, Inc. 2003, ISBN # 0-13-008215-5.

VIII. Special Resources Requirements:

None

IX. Bibliography:

Baird, Robert M. and Ramsower, Reagan M. (Eds), *Cyberethics: Social & Moral Issues in the Computer Age*, Prometheus Book, 2000, ISBN #1573927902

Ermann, M. David and Shauf, Michele S. (Eds) *Computers, Ethics, and Society*, Oxford University Press, 2002, ISBN #0195143027

Hester, D. Micah and Ford, Paul J. *Computers and Ethics in the Cyberage*, Prentice Hall, 2001, ISBN #0130829781

Johnson, Deborah G. and Nissenbaum Helen *Computers, Ethics, and Social Values (2/e)*, Prentice Hall, 2004, ISBN #0130923796

Neumann, Peter *Computer Related Risks*, Addison Wesley, 1995, ISBN #0-201-55805-x

Quinn, Michael J. *Ethics for the Information Age*, Addison Wesley, 2005, ISBN #0321194349

Stamatellos, Giannis *Computer Ethics: A Global Perspective*, Jones & Bartlett, 2007, ISBN #0763740845

Woodbury, Marsha *Computer and Information Ethics*, Stipes Publishers, 2003, ISBN #1588741559

2. Summary of the proposed revisions

COSC 380 which was a one credit hour course is being expanded to two credit hours to accommodate a one credit addition of subject matter dealing with ethics in the computer profession.

3. Justification/rationale for the revision

Ethics has always been a subject taught in COSC 380 but on a time available basis. The ABET accreditation guidelines require at least one credit hour of course material be devoted to ethics in computer science. Thus the expansion of the existing COSC 380 course by one credit hour will allow ethics in computer science to be treated in the required manner.

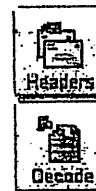
4. The old syllabus of record

No old syllabus of record exists. We are therefore applying under the provision of Syllabus of Record Amnesty for expedited review.

Part-III Letters of Support or Acknowledgement

An email correspondence from the Chair of the Department of Philosophy is attached.

From: "Sherrill J Begres" <sjbegres@iup.edu>
 Subject: Re: Computer Ethics
 Date: Mon, 20 Nov 2006 10:33:39 -0500
 To: "Sanwar Ali" <sanwar@iup.edu>
 Cc: "Sherrill J. Begres" <sjbegres@iup.edu>, "Mary MacLeod" <mmacleod@iup.edu>, "Ian Duckles" <iuckles@iup.edu>, "Eric Rubenstein" <erubens@iup.edu>, "Carol Caraway" <caraway@iup.edu>, "Bradley Rives" <Bradley.Rives@iup.edu>



Dr. Ali, please consider this message an official supporting letter stating that my department members have been polled and the result is that we do not object to your creating a one-credit course that is mandatory for the ABET Accreditation of your program.

Sherrill J. Begres, Chair
 Philosophy Department

----- Original Message ----- From: "Sanwar Ali" <sanwar@iup.edu>
 To: "Sherrill J Begres" <sjbegres@iup.edu>
 Cc: "Asamoah, Yaw A" <Yaw.Asamoah@iup.edu>; "Debbie Weaver" <dlweaver@iup.edu>; <sanwar>
 Sent: Sunday, November 19, 2006 1:00 PM
 Subject: Computer Ethics

Dear Sherill,

Thanks for your reply. The computer Science department decided to create a new 1-cr course, COSC 375 Computer Ethics. This 1-cr course is mandatory for the ABET Accreditation of our program.

Would you please send me an official supporting letter stating that your department do not object us in creating this course?

Thank you for your cooperation.

Regards,

Sanwar

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 Dr. Sanwar Ali
 Professor of Computer Science
 Indiana University of Pennsylvania
 332A Stright Hall
 210 South 10th Street
 Indiana, PA 15705, U.S.A.
 Tel: 724-357-7994 (Office)
 Fax: 724-357-2724
 Email: sanwar@iup.edu

On Mon, 6 Nov 2006 14:28:40 -0500
 "Sherrill J Begres" <sjbegres@iup.edu> wrote:

Dr. Ali, the members of my department discussed your request for a one-credit course in Computer Ethics or a change in our present course to include the following topics, which you deem

essential:

1. Why Computer Ethics?
2. Comparisons between philosophical ethics, professional ethics, and computer ethics
3. Ethics Online
4. Accountability and Computer & Information Technology
5. Property Rights in Computer Software
6. Social Implications and Social Values
 - (i) Freedom, Privacy, and Control in an Information Age
 - (ii) Software Piracy, Plagiarism, Protection, and Ownership
 - (iii) Computer Crimes
 - (iv) Computer Intruders, Viruses

My faculty decided, I think quite appropriately, that the topics you outline as necessary could not simply be added to our PHIL 222 course. The topics involve a lot of philosophical theorizing, and, hence, cannot be a simple add-on to our present course.

It also seems to us that the course you envision could not be done well as a one-credit course. If done correctly, such a set of topics needs to be a three-credit course. This is a course that is of interest to us, but, alas, we simply do not have sufficient resources for it. We are barely able to cover the courses the university and our majors require.

I am sending a copy of this to Dr. Asamoah, our Dean, to see if he has any ideas how this might be accomplished. We understand that such a Computer Ethics course is necessary for your ABET Accreditation criteria, and hope we can come up with some way to help you.

Régards,

Sherrill

----- Original Message ----- From: "Sherrill J Begres" <sjbegres@iup.edu>
To: "Sanwar Ali" <sanwar@iup.edu>
Sent: Friday, October 27, 2006 1:12 PM
Subject: Re: Need Assistance

Dr. Sanwar, I am afraid that my department is already stretched to the limit because of too many commitments with too few faculty, so a new one-credit course is out of the question right now.

I would like to talk to my faculty about changing the course content of PHIL 222 (Ethics), or at least one section of it, to include the topics on your list. We have a department meeting scheduled for next Friday, Nov. 3rd. Do you need a response before then?

How often do you anticipate needing this course?

Sherrill

----- Original Message ----- From: "Sanwar Ali"

<sanwar@iup.edu>
To: <sjbegres@iup.edu>
Cc: <sanwar>
Sent: Friday, October 27, 2006 12:47 PM
Subject: Need Assistance

Dear Dr. Begres
Chair, Department of Philosophy

This is Sanwar Ali from the Department of Computer Science. Our department's B.S. in Computer Science/ Language and System track is going through a major revision to meet ABET Accreditation criteria. To comply with the ABET criteria; we must introduced a new 1-cr course on computer ethics. The course can be titled as "Computer Ethics in the Cyberage" or simply "Computer Ethics". This 1-cr course must cover the following topics:

1. Why Computer Ethics?
2. Comparisons between philosophical ethics, professional ethics, and computer ethics
3. Ethics Online
4. Accountability and Computer & Information Technology
5. Property Rights in Computer Software
6. Social Implications and Social Values
 - (i) Freedom, Privacy, and Control in an Information Age
 - (ii) Software Piracy, Plagiarism, Protection, and Ownership
 - (iii) Computer Crimes
 - (iv) Computer Intruders, Viruses

Is your department be willing to create such a course? If not, can your department modify the existing ethics course, PHIL 222 Ethics and add topics on computer ethics mentioned above?

Please let me know your decision as soon as possible. I am the ABET coordinator for the department.

Regards,

Sanwar

=====
Dr. Sanwar Ali
Professor of Computer Science
Indiana University of Pennsylvania
332A Stright Hall