# COE 390: Seminar (1-0-1) Term 092 (Spring 2010)

# **Syllabus**

Instructor: Dr. Abdulaziz Barnawi Location: Bldg. 24-104 Office hours: U.T.: 11-11:50 AM or by appointment Office Location: Bldg 23 – 064-6 Office-Tel: 1038 E-mail: barnawi AT kfupm Web site: http://faculty.kfupm.edu.sa/coe/barnawi

# **Catalog Description:**

The purpose of this course is to help improve students' ability for presenting their technical work. It also teaches students about the nature of engineering as a profession, codes of professional conducts, ethics & responsibility, and the role of engineering societies and organizations worldwide. Case studies of conflicts between engineering professional ethical values and external demands. The course features students' participation in discussion held by COE faculty members and invited guests. Each student is required to deliver a short talk toward the end of the semester.

Prerequisite: Junior Standing.

# Textbook(s) and/or other Required Material:

There is no assigned textbook for this class, but here are the recommended references:

- 1. Johnson, D. G. Computer Ethics. Prentice Hall, Englewood Cliffs, NJ, 1994.
- 2. Harris, M. Pritchard and M. Rabins. Engineering Ethics: Concepts and Cases. Wadsworth Publishing. 2009.
- 3. Kizza, Joseph M. Ethical and Social Issues in the Information Age. Springer, 1998.
- 4. Gary Kroehnert Basic Presentation Skills, McGraw-Hill, 1998.
- 5. Bowyer, Kevin W. Ethics and Computing. IEEE Computer Society Press, 1996.
- 6. Nido R. Qubein How to Be a Great Communicator. : In Person, on Paper, and on the Podium, John Wiley & Sons, 1996.
- 7. Online resources (check course webpage).

# **Tentative Grading Policy:**

Students' class attendance and participation in class	10%	
Attendance and critique of two seminars		
Attendance of invited talks by guest speakers	15%	
Written paper on computing ethics		
Student's 1st presentation		
Student's 2nd presentation	40%	

# **Course Objectives:**

- 1. To teach students the nature of engineering as a profession.
- 2. To teach students the ethical and professional responsibility of engineering in the society.
- 3. To improve students' technical and professional communication skills.

#### **Course Learning Outcomes:**

- 1. Knowledge of contemporary issues.
- 2. Ability to make effective presentation.
- 3. Knowledge of professional and ethical responsibility.
- 4. Understanding the impact of engineering solutions in a global and societal context.
- 5. Ability to engage in life-long learning.

# **Important Notes:**

- Attendance is mandatory for all students.
- Official excuse for an authorized absence must be presented to the instructor no later than one week following the absence.
- More than **3 unexcused** absences lead to a "DN" grade.
- Check the course webpage or your Blackboard for updates and announcements.

Week	Date	Activity
1	Feb 21	Organizational meeting.
2	Feb 28	Presentation: How to prepare & present a seminar.
		Selecting Computing related Ethics topic for the 1st presentation
3	March 7	Guest presentation (1): Professional Ethics.
4	March 14	Paper submission & Student's 1st presentation.
5	March 21	Paper submission & Student's 1st presentation.
6	March 28	Paper submission & Student's 1st presentation.
		Selecting technical topic for 2nd presentation (3 articles submitted).
7	April 4	Guest presentation (2): Contemporary issues
		Technical article assigned by instructor
8	April 11	Guest presentation (3): Contemporary issues
		Submitting 1st seminar attendance form.
	Mid-Term Vacation 17-21 April	
9	April 25	Student 2nd presentation.
10	May 2	Student 2nd presentation.
11	May 9	Student 2nd presentation.
12	May 16	Student 2nd presentation.
13	May 23	Student 2nd presentation.
		Submitting 2nd seminar attendance form.
14	May 30	Feedback and general discussion.

# **Tentative Schedule and Class Activity**

# **Computing Ethics Paper & Presentation:**

Students are asked to form teams of two students each. Each team is required to select a topic related to computing ethics and write a summary paper and make a presentation of the selected topic. The summary paper should follow the given paper template. Each team will be given 10 minutes to present their paper. Both students have to share in the presentation with 5 minutes given to each. Computing ethics topics that need to be covered include:

- Intellectual Property: copyright laws, patenting laws, software piracy, and related topics.
- Privacy and Anonymity: email privacy, privacy on the web, encryption, and related topics.
- Computer Abuse and Crime: hacking, worms, viruses, trojan horses, spamming, and related topics.
- **Commerce:** anticompetitive practices, antitrust law, online auctions, fraud, trade, cyber squatting, payment, web ads, and related topics.
- Speech issues: freedom, misinformation, netiquette, blogs, chain letters, and related topics.
- Social-Justice issues: environmental, equity, noise, workplace, depersonalization, and related topics.
- **Rules of practice for Engineers:** competency, objectivity, truthfulness, faithfulness, protection of the public health, safety, and welfare, and related topics.
- **Professional obligations for Engineers:** highest standards of honesty and integrity, respect of confidentiality, service to the public interest, and related topics.

# **Second Presentation:**

Every student (no teams) is to select a recent technical topic in the field of computer engineering and prepare a professional presentation applying effective presentation techniques learned in class. Each presentation will be given 15 minutes. All presentations must be the student's original work.

# Article Selection for the 2nd presentation:

Each student is required to select three articles, among which the instructor will choose one for presentation in the class. Articles should be related to computer engineering and should be 4 pages or more. Recent (within the last three years) issues of the following publications may be used. Other sources may not be used except with the explicit approval of the instructor.

- IEEE Spectrum
- IEEE Computer Magazine
- Communications of the ACM
- IEEE Network Magazine
- Scientific American ACM, IEEE, SIAM, AT&T, BT, Intel, or IBM journal articles.