CSCI 362 001

Software Engineering Syllabus¹

Fall 2006

Instructor:

Jim Bowring: http://www.cs.cofc.edu/~bowring/

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Email: Please use bowringi@cofc.edu with Subject = "CSCI362" for a response within 24

hours. I will ignore other Emails.

Office hours: MW: 12:00 – 1:30; TR: 1:30-3:00, or by appointment

Class place and time:

Classroom: J.C. Long Building (LONG) 219

Time: MWF 11:00-11:50 AM

Catalog description:

CSCI 362 – Software Engineering – This course examines the discipline of software engineering. It provides both a historical and contemporary view of the engineering process and methodology used by software development organizations. This course will examine the software development life cycle with particular emphasis on the pertinent roles, activities, and artifacts present at each stage of development.

Prerequisite: CSCI 230 – Data Structures and Algorithms

Corequisite: COMM 104 - Public Speaking

Required text:

Software Engineering, 7th Edition, by Ian Sommerville, Addison-Wesley, 2004.

Electronic Resources:

- 1) Software Engineering Body of Knowledge (SWEBOK)
- 2) Google Scholar
- 3) The College of Charleston <u>Libraries</u> supply free full access to a wide range of electronic resources, including the ACM Digital library and the IEEE Computer Society Journals.
- 4) We will decide as an in-class project whether to use WebCT, Yahoo groups, or a "wiki" to manage the class content and group projects.
- 5) Center for Student Learning
- 6) Career Planning Guide provided by the Office of Career Services

Learning Objectives:

The principal objective of this course is to prepare you for your career as a software engineer or software architect by exploring historical and contemporary issues in Software Engineering (SE). These issues include: SE and its relation to computer science, SE vs. other engineering disciplines, SE licensure and certification, socio-technical systems, safety-critical systems, ethical issues in SE, SE methodologies, software development theory and practice, team dynamics, and project management.

¹ My thanks to Paul Buhler for providing a syllabus template

Professional Development:

I highly recommend that you join either the Association for Computing Machinery (<u>ACM</u>) or the Institute of Electrical and Electronics Engineers (IEEE) <u>Computer Society</u>. Both offer student memberships. We have a College of Charleston <u>student chapter of the ACM</u>, which you are encouraged to join and attend. In your professional careers as software engineers, you will likely be expected to maintain one or the other of these memberships.

Term paper:

Each student will produce a term paper focusing on a specific area of software engineering practice. There will be a series of intermediate deliverables including a proposal, an outline, a rough draft, and the final paper. Each student will also present their results to the class. Details to be announced.

Attendance and class participation:

I expect you to attend and participate in every class session. Your active participation will lead to your success and to the success of the class. I expect you in class on time and prepared by having read the assigned readings. Class participation counts as 10% of your grade.

Homework and assignment policy:

All assignments are due at the beginning of class on the due date. Late assignments will not be accepted for any reason.

Classroom disruption:

Please read the College of Charleston's <u>Student Code of Conduct</u>. When you come to class please turn off your cell phones and all other electronic communication devices.

Disabilities:

If you have a documented disability and are approved to receive accommodations through <u>SNAP Services</u>, please contact me during office hours or by appointment.

Student Honor Code:

You are expected to abide by the <u>Honor Code</u>. If you have a question about how to interpret the Honor Code, ask before acting! I encourage collaboration, but you must document it. Each student must submit their own homework and provide a reference to those people and documents consulted in the process.

Grading scale (new for fall 2006):

100-96 (A); 95-92 (A-); 91-88 (B+); 87-84 (B); 83-80 (B-); 79-77 (C+); 76-73 (C); 72-70 (C-); 69-67 (D+); 66-63 (D); 62-60 (D-); 59 and below (F)

Evaluation schedule:

10% Class preparation and participation including guizzes

25% Homework

20% Midterm exam

20% Term paper and class presentation

25% Final exam