

Instructor:

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Office hours: MW: 10:00 – NOON; TR: 3:00-4:00; or by appointment

Class place and time:

Classroom: Hollings Science Time: TR 1:40 – 2:55 PM

Catalog description

CSCI 362 – Software Engineering – This course examines the discipline and practice of software engineering, providing historical and contemporary views, while examining software development process models with emphasis on the pertinent roles, activities, and artifacts present at each stage of development. Related ethical issues are explored. Lectures three hours per week.

Prerequisites: CSCI 230 and COMM 104.

Course Description with Course Outcomes

http://www.cs.cofc.edu/~bowring/classes/csci_362/fall_2012/CourseDescriptionCSCI_362.2011.ABET2012r.pdf

Required text

[Software Engineering](#), 9th Edition, by Ian Sommerville, Addison-Wesley, 2011. CofC Bookstore: \$112 used; \$149 new.

Electronic Resources

- 1) [Class Website](#)
- 2) [Textbook Student Resources](#)
- 3) Software Engineering Body of Knowledge ([SWEBOK](#))
- 4) [Google Scholar](#)
- 5) The College of Charleston [Libraries](#) supply free full access to a wide range of electronic resources, including the [ACM Digital library](#) and the [IEEE Computer Society Journals](#).
- 6) [Center for Student Learning](#)
- 7) Career Planning Guide provided by the [Career Center](#)
- 8) [Ubuntu](#), [Subversion](#), [VirtualBox](#)

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 and other engineering disciplines, SE licensure and certification, socio-technical systems, safety-critical systems, ethical issues in SE, SE methodologies, development theory, and practice, SE team dynamics, SE project management, SE emerging technologies. Upon completion of this course, you will have a working knowledge of these areas based on extensive readings, research, writing, and speaking assignments. You will also gain critical analysis skills to enable you to analyze and assess SE processes and artifacts and to think holistically about software engineering.

Professional Development:

I highly recommend that you join either the Association for Computing Machinery ([ACM](#) = \$19 for a student) or the Institute of Electrical and Electronics Engineers (IEEE) [Computer Society](#). Both offer student memberships. We have a College of Charleston [student chapter of the ACM](#), which you are encouraged to join and attend. In your professional career as a software engineer / architect, your employers will likely expect you to maintain one or the other of these memberships.

Team Projects

Students will form into teams during the first weeks of class. I will assign a series of small team projects to help with team development. There will be a **term** team-project to research a specific subject and produce a series of deliverables including a term paper, a poster, and an oral presentation. I encourage students to plan to present their posters at the annual School of Science and Mathematics Poster Session in April. Details to be announced.

Attendance, class participation, and oral presentations:

Your active participation will lead to your success and to the success of the class. I expect you in class on time and well-prepared by having read the assigned readings. Some graded assignments will be done in class. You will give a 5- to 10-minute oral presentation as part of your team project. Please do not attend class if you are sick or believe you are becoming ill. It is best to document your absence through an absence report in Undergraduate Academic Services. The College requires attendance to be taken for every class session.

Homework and assignment policy:

All assignments are due when specified on the class website. I will also specify how you must name and submit each assignment. Unless stated otherwise, all assignments must be a single file in PDF format. Each assignment must be professional in appearance with your full name and other pertinent identifying information embedded in the document.

Instructor availability

I am here to teach, advise, and assist you. I maintain an open-door policy, so feel free to step into my office. Knock if the door is closed. I will respond to your emails or chats (see above.)

Disabilities:

If you have a documented disability and are approved to receive accommodations through [SNAP Services](#), please contact me during office hours or by appointment.

Student Conduct:

I expect you to abide by [The College of Charleston Student Handbook](#), which includes sections on conduct and the Honor Code. If you have a question about how to interpret the Honor Code, ask before acting! I encourage collaboration on assignments and projects, but you must document the collaboration with the names of your collaborators on the assignment.

Grading scale

100-90 (A); 89-80 (B); 79-70 (C); 69-65 (D); else (F).
Plus/minus grades given by instructor discretion.

Evaluation schedule

- 10% Class preparation and participation including quizzes
- 20% Homework
- 20% One Test
- 30% Team projects including in-class oral presentations
- 20% Final exam