**CSCI 362 01 & 02**          **Software Engineering**          **Fall 2019**
**Syllabus**

**Instructor**
   Dr. Jim Bowring:     http://www.cs.cofc.edu/~bowring/
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   *Office Hours:*  TR:  9:45 – 10:45; or by appointment

**Class place, times, and websites**
         Classroom: Harbor Walk East 301
         Times:     **01**: TR  8:30 –  9:45 AM;  **02**:  TR  11:20 AM –  12:35 PM
         Websites:  **01**: here;     **02**: here     (navigate from http://www.cs.cofc.edu/~bowring/)

**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, MATH 207, 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, 10th Edition, by Ian Sommerville, Addison-Wesley, 2015. CofC Bookstore: $81 used; $181 new.

**Electronic Resources**
   1) Software Engineering Body of Knowledge (SWEBOK)
   2) 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.
   3) Center for Student Learning
   4) Career Planning Guide provided by the Career Center
   5) Git, GitHub, 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 one or more of: the Association for Computing Machinery (ACM = $19 for a student), the Institute of Electrical and Electronics Engineers (IEEE) Computer Society, National Center for Women and Information Technology. All offer student memberships. We have a College of Charleston student chapter of the ACM, student chapter of Women in Computing (WIC), a cybersecurity club, and a data science club, all of 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 at least one of these memberships. The department has several undergraduate research labs.

**Team Projects**
Students will form into teams during the first week of class. I will assign a series of small team projects to help with team development. There will be a **term** team-project to solve a specific problem and produce a series of deliverables including a wiki, term paper, 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 2018.

**Attendance, class participation, and oral presentations**
Attendance is mandatory. Each absence after 3 has a penalty of 5 of 100 final points. 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. 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 any absence with an absence report through Undergraduate Academic Services. The College requires attendance to be taken for every class session.

**Blog, Wiki, and Assignment policy**
You will maintain a professional-grade blog titled with your name where you will post all individual assignments by the date specified. Your team will maintain a professional-quality wiki where you will post all team assignments by the date specified. Each assignment must be professional in appearance with pertinent identifying information.

**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); else (F). Plus/minus grades given by instructor discretion.

**Evaluation schedule**
- 10%    Class preparation and participation including quizzes
- 25%    Blog and assignments
- 15%    Test #1
- 30%    Team projects including term-paper, poster, wiki, and in-class oral presentations
- 20%    Final exam