CSIS 658 Software Testing and Maintenance Spring 2016 Syllabus

Instructor:

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Office hours: TR: 10:00 – 11:00 or by appointment

Class place and time

Classroom: HWEast, Room 301 Times: R 5:30-8:15

Website: Here

Mediasite: https://lowcountrygraduatecenter.mediasite.com (public domain)

Catalog description

CSIS 658 Software Testing and Maintenance - An introduction to the concepts and methods associated with software testing and maintenance. Testing topics to include: testing as part of the requirements for engineering and software design, test plan writing, and static and dynamic testing. Maintenance topics to include: an overview of corrective, adaptive, perfective, and preventive maintenance activities as well as organizational managerial issues. Prerequisites: CSIS 602.

Required text:

Software Testing and Analysis. Mauro Pezze and Michal Young. Wiley, 2008.

Electronic Resources:

- 1) Software Engineering Body of Knowledge (SWEBOK)
- Google Scholar; Google Documents: http://docs.google.com;
- 3) The College of Charleston <u>Libraries</u> supply free full access to the <u>ACM Digital library</u> and the <u>IEEE Computer Society Journals</u>.
- 4) CofC: Career Center, Cistern Online, Center for Student Learning

Learning Objectives:

The principal objective of this course is to for you to learn the fundamental principles behind software testing, and how to apply these principles to produce better software, faster. You will be prepared to carry out high-quality testing activities in your professional careers because you will learn testing as a mental discipline. You will also learn how testing supports maintenance activities through regression testing.

Professional Development:

I highly recommend that you join the Association for Computing Machinery (<u>ACM</u> = \$19 for a student), ACM's <u>Women in Computing</u> (WIC), the Institute of Electrical and Electronics Engineers (IEEE) <u>Computer Society</u>, the National Center for Women and Information Technology (<u>NCWIT</u>), or join our student ACM or student ACM-WIC for free! A great way to advance your career is to become an active member of at least one of these professional organizations.

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. Please do not attend class if you are sick or believe you are becoming ill.

Homework and assignment policy:

All assignments are due at the beginning of class on their due date. Unless otherwise specified, you will E-mail each assignment (see above) as a single PDF file. I require professional-grade documents containing identifying information as well as the work itself.

Team projects:

Students will form into teams in the first days of class. Various team projects will be assigned during the semester. Teams will arrange to work outside of class. Teams will maintain a professional-grade public wiki documenting their work.

Disabilities:

If you have a documented disability and approval to receive accommodations through **SNAP Services**, please contact me during my office hours or by appointment.

Student Conduct:

I expect you to abide by <u>The College of Charleston Student Handbook</u>, 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:

Superior (A); Very Good (B+); Good (B); Fair (C+); Acceptable (C); Not Acceptable (F)

Evaluation Scheme:

10% Class preparation and participation

25% Assignments

25% Team Projects

20% Midterm

20% Final exam