University of Detroit Mercy
College of Engineering and Science
Department of Mathematics, Computer Science and Software Engineering

CSSE-5500 01 Software Quality Engineering
Fall 2014

DESCRIPTION OF COURSE: Developing Requirements through Delivery, Maintenance, and Process Improvements, Quality Goals, Planning and Executing Quality Assurance Activities, Meeting Quality and Schedule Goals, Inspections, Manual and Automatic Analysis Techniques, Design for Testability, Test Planning and Execution, Process Improvement, Projects.

PREREQUISITES BY TOPIC: Familiarity with Java or C++

REQUIRED TEXT: Software Engineering: A Practitioner's Approach, 8th ed., by Roger Pressman, Bruce Maxim, McGraw-Hill, ISBN: 9780078022128, 2014

RECOMMENDED TEXTS: Software Quality Assurance: From Theory to Implementation, by Daniel Galin, ISBN: 978-0201709452

INSTRUCTOR: Dr. Shadi Banitaan – (313) 993-1060
                    Email: banitash@udmercy.edu

OFFICE HOURS: Tuesday & Thursday 2:00PM – 3:00PM; email or call to schedule an appointment.

LECTURE: MW 5:15 PM-6:30 PM, Room E234.

COURSE OUTCOMES: Upon completion of the course, students will be able to:

1. Understand the reason and purpose of software quality assurance.
2. Comprehend the ingredients of quality assurance: software quality assurance; configuration management; verification and validation; and test and evaluation
3. Understand the techniques of verification and validation: reviews, inspections, walkthroughs, and audits
4. Be able to test different types of applications using testing methods
5. Be able to articulate automated unit testing with JUnit
6. Understand metrics common to software quality assurance.

GRADING:

5%	Quizzes/HW
15%	Term Paper
40%	Projects
20%	Midterm Exam
20%	Final Exam

EXAM SCHEDULE (TENTITATIVE):   Friday, December 12, 5:00 PM-6:50 PM.

GRADING SCALE:

93-100% A	87-89% B+	77-79% C+	69-67% D+
90-92% A-	83-86% B	73-76% C	60-66% D
	80-82% B-	70-72% C-	0-59% F

LATE ASSIGNMENTS:

Due dates will be provided for each assignment when it is posted. Late assignments will be accepted with a penalty of 10% per day late. Late assignments will not be accepted more than 1 week past the due date. No extensions will be given due to illness, school activities, etc. since there is plenty of time to complete assignments before the due date. Extensions will be considered in the case of serious family emergencies, extended illness, or other lengthy absence only, and must be requested prior to the due date.

IMPORTANT DATES:

Aug 25	Classes Begin
Aug 30-Sep 1	Labor Day Holiday
Sept 1	Last Day to Add a Class
Sept 1	Last Day to Drop a Class without a "W"
Oct 13-14	Fall Break- University open but no classes
Oct 21	Mid-term Grades are due
Oct 27	Advising for Term II Winter and Summer
Nov 03	Registration for Winter and Summer begins
Nov 17	Last Day to Withdraw from Class
Nov 26	Thanksgiving Break- University open but no classes
Nov 27-30	Thanksgiving Recess (UNIV CLOSED)
Dec 9-13	Final Exam Week
Dec 13	Official End of Term I/Fall
Dec 15	Final grades due

ACADEMIC INTEGRITY:

Students are expected to conform to a high standard of honesty and integrity in this course. Copying the work of someone else and other forms of cheating are strictly prohibited. Permitting or tolerating such behavior is also prohibited. The minimum penalty for any offense is a 0 on that assignment. The culprits may be subject to additional sanctions, up to and including expulsion from school for serious offenses, as prescribed by the University Catalog and the Engineering and Science Student Handbook.

STUDENTS WITH DISABILITIES

UDM is committed to all students achieving their potential. If a student has a disability or believes that s/he may have a disability (including a physical, mental, or emotional disability) that may require an accommodation, students should contact Emilie Gallegos in the University Academic Services (UAS) office for further discussion. The UAS office is located on third floor of the Library. Because accommodations often require adequate time to implement, students should make arrangements to contact the UAS as soon as possible.

As protected personal information, all information regarding a student's disability is confidential and must be maintained in a confidential manner in compliance with state and federal laws, including but not limited to information regarding the fact that a student may be experiencing a disability and the nature of the disability.