**Syllabus**

**CSE 5325/CSE 4322: Software Engineering**

**Management, Maintenance, and Quality Assurance**

**Spring 2015**

Instructor:  Ronald Cross; MS

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Office Location: ERB 549

Office Hours: Wednesday & Friday 10:50 – 12:50 PM or by Appointment

Course Time & Location: 3:00 PM – 3:50pm; Engineering Research Bld, Rm ERB130 (Monday, Wednesday & Friday)

**Section Information:**

This is a combined section of CSE 5325-002 and CSE 4322-001

**Course Description from University Catalog:** Issues and principles for software management; managerial and support aspects of software projects, including: processes, estimation techniques, planning and scheduling, risk analysis, metrics, and quality assurance. Other topics include: configuration management, verification and validation, and maintenance; team project.

**Course Objective:** This course will cover various software engineering principles and techniques from a project management point of view. The course coverage will include, but not be limited to, the following topics:

* Software Engineering: Definitions and Life Cycles
* Project Management: Definitions, Issues and Challenges
* Software Cost estimation
* Project Planning and Scheduling
* Risk Analysis
* Metrics
* Testing and Quality Assurance
* Project Maintenance

**Student Learning Assessment:** For each of the above topics, students will learn the basics and practice them via assignments/project. Students' knowledge will be tested via appropriate exam and/or assignment questions. Students may present a portion of their projects in this class. Prior arrangement with the instructor is required. Project Presentations to the class are an optional bonus assignment, see Grading Policy below.

**Required Textbook & Other Course Materials:** Software Engineering: Principles and Practice; Hans Van Vliet; 3rd Edition; John Wiley & Sons; also access to Internet for Viewing Assigned Videos is required.

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**Grading Policy:**

* Exams (4)          100 Pts each (400 Pts Total)
* Final Exam                 250 Pts
* Weekly Quiz (10) 10 Pts each (100 Pts Total)
* Home Work Assignments (5) 20 Pts each (100 Pts Total)
* Projects 150 Pts
* Bonus Assignment 25 Pts
* Total Points Possible out of 1000 1000 + 25 bonus points

Please note your grade will be based upon points earned against the base of on a 100% grade scale. Example grades are:

Total points earned of 800 divided by 1000 points base x 100% = 80%

Total points earned of 900 divided by 1000 points base x 100% = 90%

Total points earned of 550 divided by 775 points (cumulative to date) x 100% = 71%

\*Note: For final cumulative grade percentage, all numerical grades will be rounded to the nearest unit

**Grade Policy:** A = 100 - 90, B = 89 - 80, C = 79 - 70, D = 69-60, F = 59 and Below

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**Attendance:** At the University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, after the first class I will not take attendance. Having said that attendance is recommended in that points of discussion by the instructor and/or classmates may appear on weekly quizzes. As a courtesy to your instructor and classmates please be on time to class, late arrivals are disruptive. Please note the classroom doors may be locked with no further entry allowed 10 minutes after start of class.

**General Policies:**

* Please use “CSE 5325” (or “CSE 4322” as the case may dictate) in the Subject line of all e-mail correspondence PLUS the section number. Include your student number and name at the end of each email.
* Any homework or projects assigned is due at the beginning of the class on the due date. No Make-up work will be accepted and no exceptions.
* No make-up quizzes, exams or assignments will be given.
* The Comprehensive Final Exam grade **percentage** may be substituted for any 1 of the 4 exams previously given.
* You may select any tools/language/systems to implement your assignments/project. This course focuses on the management aspects of software engineering, hence will not teach any programming languages or tools.
* All exams are closed book.
* The instructor reserves the right to modify the policies, calendar, assignments, slides or due dates if necessary.
* Faculty are required by law to provide "reasonable accommodation" to students with disabilities, so as not to discriminate because of that disability. Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.

**Expectations for Out-of-Class Study:** Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend ***at least an additional 9 hours per week*** of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

**Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Title IX:** The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit [www.uta.edu/titleIX](http://www.uta.edu/titleIX).

**Academic Integrity:** Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit (Discussions during first class will be held as to where nearest exits are). When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

**Class Schedule:**

“*As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.” – Ron Cross*

1/21/15: Introductions, Class Syllabus, Lessons Learned & Sayings, Chapter 1

1/23/15: Chapter 1

1/26/15: Chapter 2

1/28/15: Chapter 2

1/30/15: Chapter 2, Project Kickoff Discussion (Read Chapter 10 on Modeling Now)

2/02/15: Chapter 3, Guest Speaker (Don Cross, VP Telecom Industry: Business Prac’s & Ethics)

2/04/15: Chapter 3

2/06/15: Chapters 3, 4

2/09/15: Chapter 4, Homework Assignment #1 Due

2/11/15: Exam #1

2/13/15: Chapter 5

2/16/15: Chapter 5

2/18/15: Chapters 5, Guest Speaker (Bob Wolf , VP Thumb Tech: Topic – People Management & Team Org)

2/20/15: Chapter 6, Homework Assignment #2 Due

2/23/15: Chapter 6

2/25/15: Chapter 6

2/27/15: Chapter 7, Project Progress Discussions (Should have Read Chapter 10 on Modeling)

3/02/15: Chapter 7

3/04/15: Chapter 7

3/06/15: Exam II, Homework Assignment #3 Due

3/09/15: Spring Vacation

3/11/15: Spring Vacation

3/13/15: Spring Vacation

3/16/15: Chapter 8

3/18/15: Chapter 8 Industry Guest Speaker (A. Jaworski: Topic – Requirements Engineering)

3/20/15: Chapter 8

3/23/15: Chapter 9

3/25/15: Chapter 9

3/27/15: Chapter 9

3/20/15: Chapter 10, Homework Assignment #4 Due

3/23/15: Chapter 10

3/25/15: Chapter 10

3/27/15: Exam III

3/30/15: Chapter 11, Final Project Discussion Check

4/01/15: Chapters 11

4/03/15: Chapter 11

4/06/15: Chapter 12, Homework Assignment #5 Due

4/08/15: Chapter 12

4/10/15: Chapter 12, Student Projects Due

4/13/15: Chapter 13

4/15/15: Chapter 13

4/17/15: Chapter 13

4/20/15: Chapter 14

4/22/15: Chapter 14

4/24/15: Chapter 14

4/27/15: Exam IV

4/29/15: Student Presentations

5/01/15: Student Presentations, Guest Speaker

5/04/15: Student Presentations

5/06/15: Student Presentations

5/08/15: Student Presentations & Final Exam Review

5/13/15: Final Exam – 2:00 to 4:30pm

Please refer to University Final Exam Schedule for the Spring 2015 term on UTA Website to Confirm the above date and time.

**Home Work Assignments:** All Homework assignments are to be completed and handed in on the specified dates unless otherwise specified by the instructor. No late homework will be accepted. Use of proper grammar is expected especially with today’s word processors and their helps that are available to the student. Communication is important, as is proper word usage in Engineering. All homework is to be typewritten (double spaced) with the following single spaced at the top of the page and left justified – Date Due, Student Name, Course Number and Section, Homework Assignment (Chapter & Problem Numbers), see immediately below:

9/29/14

Name of Student

CSE 5312 Section 002 (Or CSE 4322 as the case may dictate)

Chapter 5, Problems 1,7 & 9

Note: Points will be counted off on any assignment handed in without the above properly located.

The homework assignment for each chapter is listed below. The Date each assignment is the due is listed on the course schedule above. Be aware exams & quizzes may pull from all homework assignments hand outs and assigned reading:

HmWk Assignment #1: Chapter 3 – 18

HmWk Assignment #2: Chapter 5 – 9

HmWk Assignment #3: Chapter 7 – 16

HmWk Assignment #4: Chapter 9 – 18

HmWk Assignment #5: Chapter 11 - 25

The student should be aware that to answer these questions requires more than a single page. You should approach this as a student of UTA recognizing that the quality of work and critical thinking requirements are very high. If you approach this assignment as “just one more thing to do” you will not score well. Spend time on the question thinking about what is asked. Do extra reading in the text and with outside sources. Formulate your answer and then use good academic verbiage as you write (See academic word lists references on Black Board). Credit all your sources. Please note, *Wikipedia* is not a recognized academic source. Do not use this as a source of information. Points will be counted off.

Also, each student will be required to “cut & paste” and sign The UTA Honor’s Code (see above) to each submittal for grade (Homework, Project, etc). This should be the last page of each submittal.

**Optional Project Presentations:** If a student desires to give a presentation related to their project, 1/3rd of the grade will come from the average score of the audience assessments of that presentation. The other 2/3rds will be by the professor. The presentation shall be limited to 15 minutes or less in total depending on the number of presentations to be given. As an advisement presentations may be required to be given as a group based upon class time limitations.

**Emergency Phone Numbers**; In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911.

**Library Support:**

Library Home Page <http://www.uta.edu/library>

Subject Guides <http://libguides.uta.edu>

Subject Librarians <http://www.uta.edu/library/help/subject-librarians.php>

Database List <http://www.uta.edu/library/databases/index.php>

Course Reserves <http://pulse.uta.edu/vwebv/enterCourseReserve.do>

Library Tutorials <http://www.uta.edu/library/help/tutorials.php>

Connecting from Off- Campus <http://libguides.uta.edu/offcampus>

Ask A Librarian [http://ask.uta.edu](http://ask.uta.edu/)

The following URL houses a page where we have gathered many commonly used resources needed by students in online courses: <http://www.uta.edu/library/services/distance.php>.

The subject librarian for your area can work with you to build a customized course page to support your class if you wish. For examples, visit <http://libguides.uta.edu/os> and <http://libguides.uta.edu/pols2311fm> . If you have any questions, please feel free to contact Suzanne Beckett, at [sbeckett@uta.edu](mailto:sbeckett@uta.edu) or at 817.272.0923.