This page contains the syllabus for Software Engineering for Fall 2014. "The course syllabus contains important information regarding course requirements and the grading system utilized. It is the responsibility of the students to read the syllabus and consult the instructor if they have questions." (from UNC 2013-2014 Undergraduate Catalog)

CS 350 002 - Software Engineering - 3 credits
Fall 2014

Class meeting time and location: Tuesday and Thursday, 8:00am - 9:15am in Ross Hall 2230G (Linux Lab)
All class material is accessible through Blackboard.

Instructor: Mehrgan Mostowfi, Ph.D. (mer-gone mos-tow-fee)
School: Mathematical Sciences
Office location: ROSS 2240B
Office hours: Tuesday, Wednesday and Thursday, 10:00am - 11:00am, or email to schedule an appointment.
Email: mehrgan.mostowfi@unco.edu
Homepage: http://www.mathsci.unco.edu/facstaff/mostowfi/

Required textbook: The required textbook is Software Engineering, 9th Edition, by Ian Sommerville. There will be assigned readings to complement the lectures. These readings will come from handouts and/or material in the textbook.

Catalog course description: Study concepts of engineering software systems. Design and implement a software system project using the team approach.

Course objectives: As a result of successfully completing this course, students will:

1. Understand software engineering concepts, principles, and techniques
2. Understand the phases and activities of the software process
3. Have gained experience in practical software development work within the framework of integrated development environments

Prerequisites:

- CS 301 - Algorithms and Data Structures
- Knowledge of general programming concepts, and an object-oriented programming language.

Course topics: This course will cover the following topics:

- Week 2 (Sep 1 – 7, 2014): Software processes
- Week 3 (Sep 8 – 14, 2014): Agile software development
- Week 4 (Sep 15 – 21, 2014): Agile software development
- Week 5 (Sep 22 – 28, 2014): Requirements engineering
- Week 6 (Sep 29 – Oct 5, 2014): Requirements engineering
- Week 7 (Oct 6 – 12, 2014): System modeling
- Week 8 (Oct 13 – 19, 2014): System modeling
- Week 9 (Oct 20 – 26, 2014): Architectural design
- Week 10 (Oct 27 – Nov 2, 2014): Architectural design
- Week 11 (Nov 3 – 9, 2014): Design and implementation
Week 12 (Nov 10 – 16, 2014): Design and implementation
Week 13 (Nov 17 – 23, 2014): Software testing
Week 14 (Nov 24 – 30, 2014): Software testing
Week 15 (Dec 1 – 7, 2014): Software evolution
Week 16 (Dec 8 – 14, 2014): No class, project demo

Grading: Students will earn a grade based on mini-exams and a project. The grade breakdown is:

- Mini-exams: 40% (five exams, held in-class roughly every third week)
- Project: 60% (35% for your individual contribution to the project, and 25% one final project grade for the entire class)

Individual contribution will be graded based on individual assignments, effort and time put in advancing team tasks and overall project progress, quality of product parts developed individually, clarity and quality of code and other documents generated, cooperation and collegiality with team mates and other teams, and professionalism. The shared project grade will be determined based on completeness and quality of the final product. All the developed requirements for the project must be met.

The grading scale is "no worse than" (+ or - grades MAY be given to marginal performance, but do not expect them):

- A = 90% through 100% and above
- B = 80% through 89.99%
- C = 70% through 79.99%
- D = 60% through 69.99%
- F = Less than 59.99%

Course policies:

- I expect you to make sure your UNCO email works and check your email regularly. Email will be the main means of communication between you and me. Not having checked your email will not be accepted as an excuse for missing due dates.

- If you must submit work late you need to talk to me at least one-week before the due date in question. Otherwise, late work cannot be accepted except in cases of verifiable emergencies.

- Attending class and project meetings is mandatory and very important. I may choose to track attendance.

- We will be observing all university policies regarding religious holidays and disabilities. Any student requesting disability accommodation for this class must inform the instructor giving appropriate notice. Students are encouraged to contact Disability Support Services (www.unco.edu/dss) at (970) 351-2289 to certify documentation of disability and to ensure appropriate accommodations are implemented in a timely manner.

- Incomplete ("I") grades will only be given in the case of severe hardship including verifiable medical emergencies or legal troubles. Simply being "overloaded" and unable to complete your work is not grounds for an "I" grade.

- Out of courtesy to other students please make sure that you turn off, or place in silent mode, your cell phone.

Academic Integrity/Academic Dishonesty: I expect students to be honest and not cheat on their assignments and exams. The exams must be completed without giving or accepting assistance from other students. Any source code copied from another source must be credited as such. Open source software used must maintain all headers and other information as required by the open source license used. I expect you to know the University's policies on student conduct, academic dishonesty, etc. UNC's policies and recommendations for academic misconduct will be followed. For additional information, please see the Dean of Student's website, Student Handbook link and current catalog.

Every part of this syllabus is subject to adjustment as the semester progresses. Please contact me as soon as possible if you have particular interest in material that is relevant to the class topic but not covered in enough detail; I will be happy to accommodate reasonable requests for modifications.

Last update on August 11, 2014