Software Engineering

Winter 2016

Instructor:	Michael Hilton	**Time:**	T & Th 4:00 – 5:20
Email:	hiltonm@eecs.oregonstate.edu	**Place:**	WNGR 153
Office Hours:	T 10-11, F 1-2 Kelley 2087		
TAs:	Nick Nelson nelsonni@oregonstate.edu M 2-3, W 2-3 Kelley Atrium Shane McKee mckeesh@onid.oregonstate.edu T 11-12, F 2-3 Kelley Atrium		

Goal: The main goal of this class will be help students develop the skills that will enable them to build high quality software, in a professional manner. This includes writing code that is reliable, well designed, meets the requirements, is well designed, and can be done in a reasonable amount of time. We will also discuss important skills necessary for working with others while developing software including version control, peer reviews, issue tracking, and testing.

Textbook: There are no required textbooks for this class. Online readings will be posted before each class.

Class Website: All the information you need for our class will be on our website:
http://web.engr.oregonstate.edu/~hiltonm/classes/cs361

Activities:

- **Class Participation:** There will be opportunities for class participation thought the term
- **Writing Assignment:** As this is a Writing Intensive Class, there will be a 2000 word essay which we will revise multiple times, as per University Policy
- **Group Project:** The main focus of this course will be the Group project. There will be 4 milestones each which will be two weeks long.
- **Final:** There will be a comprehensive final

Grading:

Class Participation (10%)
Writing Assignment (20%)
Group Project (50%)
Final (20%)

Due Dates and Lateness: Each team will be allowed 3 late days for their group project. These days can be used individually or in a single block.

All writing assignments will be due in class. The group projects will be mostly submitted online, although some design documents maybe be delivered in hard copy form.

Academic Honesty: Reuse and building upon ideas or code are major parts of modern software development. As a professional programmer you will never write anything from scratch. This class is structured such that all solutions are public. You are encouraged to learn from the work of your peers.

Students must work alone on the vision statement.The rules regarding Academic Dishonesty will be strictly enforced. For more information please refer to the Student Conduct and Community Standards.

Students with Disabilities: Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at (541) 737-4098. Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should be aware of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, and no later than the first week of the term.

Course Objectives:

- Select the most appropriate software process model to use in a particular situation
- Synthesize requirements for a realistic software system and write a requirements specification document
- Model system requirements using one or more semi-formal notations such as UML, dataflow diagrams, entity-relationship diagrams, or state diagrams
- Design software systems at an architectural level and at lower levels, using one or more techniques, such as object-oriented design or agile methods, and express these designs in design specification documents
- Validate designs and adjust the specification or design as necessary
- Describe several methods of estimating the cost and developing a schedule for a programming project
- Participate effectively in a team environment
- Produce professional-quality software-related documents
- Develop and articulate content knowledge and critical thinking in the discipline through frequent practice of informal and formal writing.
- Demonstrate knowledge/understanding of audience expectations, genres, and conventions appropriate to communicating in the discipline.
- Demonstrate the ability to compose a document of at least 2000 words through multiple aspects of writing, including brainstorming, drafting, using sources appropriately, and revising comprehensively after receiving feedback on a draft.

The Last Page:

This page is so I can gather a little information about you at the beginning of the class. Please fill it out, tear it off and leave it with me on the way out.

Who are you?

Name: _____

Email: _____

Experience?

How much experience do you have with Java?: _____

How much experience do you have working in a team?: _____

Class Expectations?

Please take a minute to write out what your goals and expectations are for CS361. What do you want to learn? What do you expect to learn? Are these the same thing?