Course Syllabus

Course Information
CS/SE 6301.010, Agile Methods
Fall 2013
Mon/Wed 2:30-3:45
ECSS 2.312

Professor Contact Information
Dr. Mark C. Paulk
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Office hours: Mon/Wed 11:00-12:00, Tue/Thur 2:30-3:30, or by appointment

Course Pre-requisites, Co-requisites, and/or Other Restrictions
CE/CS/SE 3354 (Software Engineering)

Course Description
The agile methods course will address what agile methods are, how they are implemented (correctly), and their impact on software engineering. A variety of agile methods will be described, but the focus will be on Scrum and Extreme Programming. Issues associated with planning and controlling agile projects, along with the implications of empowered teams on the customer-supplier dynamic, will give a fuller picture of how the agile practices are realized. The course will conclude with a discussion of some of the issues facing organizations adopting agile methods.

Student Learning Objectives/Outcomes
1.   Ability to apply critical thinking in analyzing a software engineering method.
2.   Ability to analyze the tradeoffs in selecting a software engineering method.
3.   Ability to understand the practices and philosophies of agile methods.
4.   Ability to understand and apply Scrum.
5.   Ability to understand and apply Extreme Programming.
6.   Ability to tailor an agile method to the needs of the project.

Required Textbooks and Materials
None.

Suggested Course Materials
- K. Beck and C. Andres, Extreme Programming Explained: Embrace Change, 2nd Edition, 2004.
- B.W. Boehm and R. Turner, Balancing Agility and Discipline: A Guide for the Perplexed, 2004.

- A. Cockburn, <u>Crystal Clear: A Human-Powered Methodology for Small Teams</u>, 2004.
- M. Cohn, <u>Succeeding with Agile: Software Development Using Scrum</u>, 2009.
- H. Kniberg, <u>Scrum and XP from the Trenches</u>, 2007.
- C. Larman, <u>Agile and Iterative Development: A Manager's Guide</u>, 2004.
- C. Larman and B. Vodde, <u>Scaling Lean & Agile Development: Thinking and Organizational Tools for Large-Scale Scrum</u>, 2008.
- K. Schwaber and M. Beedle, <u>Agile Software Development with Scrum</u>, 2002.
- M. Stephens and D. Rosenberg, <u>Extreme Programming Refactored: The Case Against XP</u>, 2003.

Assignments & Academic Calendar

Week 1	Agile Manifesto and Principles
Week 2	Scrum Overview
Week 3	Extreme Programming Overview
Week 4	XP Corollary Practices
Week 5	Agile Management Practices
Week 6	Risk Management and the Customer in Agile Methods
Week 7	Crystal Clear
Week 8	Lean Development and Kanban
Week 9	Selecting a Software Engineering Methodology
Week 10	Agile Engineering Practices
Week 11	Tailoring and Improving Agile Methods
Week 12	Miscellaneous Agile Methods
Week 13	Challenges in Adopting Agile Methods
Week 14	Tradeoffs for Software Engineering Methods
Week 15	Agile Methods and Software Process Frameworks

Grading Policy
Homework: 40%
Exam 1: 20%
Exam 2: 20%
Exam 3: 20%

Exam 3 will be scheduled during the final exam period, but will not be cumulative.

Course & Instructor Policies
1. Make-up exams will be granted only for exceptional conditions, as approved by the instructor.
2. There will be no extra credit work.
3. All assignments are due by the beginning of class on the day due.
4. Late work will be assessed a penalty of 10% per (partial) day. It may be turned in no more than two days late unless there are extraordinary circumstances.
5. Assignments should include the class, your (team) name, and the title of the assignment. -5% for each that is missing.
6. File names of softcopy assignments should include the class, assignment, and your (team) name, e.g., se6301hw01jdoe.doc. -5% for each that is missing.

7. Lowest homework grade will be dropped.
8. If a member of a project team is not contributing to the team's work, the team may notify me in writing as to the circumstances. The student will be given a chance to participate; at the end of that period if there is no improvement, the student will be removed from the team and given a zero (0) for the project.
9. Assignments should be submitted through eLearning.
10. You are expected to attend class.
11. Cell phones shall not be used in the classroom during sessions. If you are expecting an emergency you may place them on silent. If you receive a call, leave the room.
12. Taping is not allowed.
13. Exams are closed book; no laptops; a one-page (front and back) set of notes may be used.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.