

The University of Virginia
School of Continuing and Professional Studies
Northern Virginia Center

Number, Title, and Credits

IT3350 Agile Project Management;
Three semester hours of credit.

Prerequisites

A working knowledge of Project Management and the PMBOK® is nice to have but not necessary.

Instructor:

Mike Vito
mav9f@virginia.edu

Semester, Dates, Times

Fall 2013
9/3/2013 - 12/14/2013

Course Description

IT3350 covers the principles of the agile methodology and applies those principles to project management. Over the last 10 years the agile movement has spread through the software development community and other organizations both large and small. The emphasis is on software development but the principles can be applied to any type of project. As the momentum for change continues, the "tipping point" for the agile methodology is at hand.

IT3350 introduces the principles of Agile Project Management and covers the frameworks and practices used by agile teams. Innovative ways of gathering requirements, estimation, release planning, performance metrics, and scaling are covered with the Agile Manifesto in mind.

Objectives

The overall objective of IT3350 is to provide students with practical experience in applying agile methodology to their work environment. Both novice and seasoned managers will be able to apply agile concepts to their situation at any level. Students will get a range of tools to apply to their work. The student will be able to:

- understand the differences between conventional and agile approaches
- estimate in an incremental and iterative fashion using practical techniques
- plan increment cycles
- plan release cycles
- capture and apply metrics
- understand scaling issues
- apply agile principles to a range of decision possibilities
- apply practical metrics

Instructional Procedures

This course will be conducted both in a virtual classroom and over the internet. A typical class session will include lecture material that students can download and view. The internet will be used to post material and for interaction with questions and discussion threads. In addition there will be several group sessions conducted using UVACollab where everyone will be expected to be present.

Textbooks

1. Agile Project Management: Creating Innovative Products, Second Edition

By: Jim Highsmith

Publisher: Addison-Wesley Professional

Pub. Date: July 10, 2009

Print ISBN-10: 0-321-65839-6

Print ISBN-13: 978-0-321-65839-5

2. Agile Estimating and Planning

By: Mike Cohn

Publisher: Prentice Hall

Pub. Date: November 01, 2005

Print ISBN-10: 0-13-147941-5

Print ISBN-13: 978-0-13-147941-8

3. User Stories Applied: For Agile Software Development

By: Mike Cohn

Publisher: Addison-Wesley Professional

Pub. Date: March 01, 2004

Print ISBN-10: 0-321-20568-5

Print ISBN-13: 978-0-321-20568-1

Student Expectations

Students are expected to have access to a computer with a working connection to the internet and a web browser so that they can collaborate and turn in assignments online.

Familiarity or working knowledge of project management is a nice to have. Students should have experience with a team as a member, team lead, project manager, or stakeholder.

Evaluation

Grading will be based on online participation, homework exercises, and exams. The online participation will consist of group exercises and discussions that will be conducted via the Internet. The homework exercises will consist of questions about the readings and lecture. The following is a breakdown of each category by percent:

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|---------------------|-------|
| Participation: | 20% |
| Homework Exercises: | 50% |
| Midterm Exam | 15% |
| Final Exam | 15% |
| | ----- |
| | 100% |

The Academic Honor System

Students will adhere to the University of Virginia's Honor Policy. It is assumed that students will be truthful in their dealings with the instructor and not cheat on their homework, projects, . It is also assumed that any incidence of cheating will be reported to the Honor Committee. When working individually, students should neither give nor receive help, other than from the instructor. The instructor will indicate which assignments and activities are to be done individually or which permits collaboration. Guidance for working individually or in a group will be carefully explained. More information can be found at:

<http://www.student.virginia.edu/~honor/>

If you have any questions about the Honor System, you may contact the Honor Committee in Charlottesville, VA at 804-924-3452.

Special Needs

If you are a student with special needs you should let the instructor know within the first week of class. Written documentation will be required. You should also visit the following website to review your rights and responsibilities as a student:

<http://www.virginia.edu/vpsa/disabilities-svcs/index.html>

and the following website for the Learning Needs and Evaluation Center:

<http://www.virginia.edu/studenthealth>

Course Outline

| Class Meeting | Topics | Readings |
|----------------------|--|--|
| Class 1 | Course Introduction What is Agile? The agile manifesto Agile compared to conventional project management methodologies Building an Agile Team Managing Change The Agile PM Model | Highsmith Chapters 1-5 |
| Class 2 | An Overview of xP, Scrum, Kanban, and Lean principles and practices | The Scrum Guide, Schwaber Cohn, User Stories Chapter 15, Appendix A Notes: Internet |
| Class 3 | Agile PM and the Scrum Process | Highsmith Chapter 6-7 |
| Class 4 | Agile Requirements | Highsmith Chapter 7 Cohn, User Stories Chapters 1-4 |
| Class 5 | Agile Requirements; Agile Planning, Monitoring, and Adapting | Cohn, User Stories Chapters 5-7; 12-16 |
| Class 6 | Agile Planning and Estimation | Cohn, Estimation Chapters 1-4 |
| Class 7 | Agile Estimation; | Cohn, Estimation Chapters 5-8 |
| Class 8 | Midterm Exam | |
| Class 9 | Agile Planning; Agile Roadmap Planning | Highsmith Chapters 8-9 |
| Class 10 | Iteration Planning | Cohn, Estimation Chapters 14-18 |
| Class 11 | Monitoring and Communication; Softskills | Cohn, Estimation Chapters 19-22 |
| Class 12 | Metrics, Governing, Scaling | Highsmith Chapters 10-12 Cohn, User Stories Chapter 11 |

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| Class 13 | Additional topics (TBD): Agile risk mitigation Agile in the enterprise Agile portfolio Management | |
| Class 14 | Additional Topics (TBD:) Agile applied to PMBOK Team Facilitation | |
| Class 15 | Final Exam | |