CARNEGIE MELLON UNIVERSITY

H. JOHN HEINZ III COLLEGE OF PUBLIC POLICY AND MANAGEMENT – PITTSBURGH CAMPUS

Last Revised: Spring 2021

Course: Agile Methods – 95-874, Units: 6

Instructor: John Davis (jadavis@andrew.cmu.edu)

Office Hours: Flexibility by phone; students encouraged to schedule appointments as needed.

Who This Course Is Designed For:

Businesses must compete in new ways for growth and relevancy, driven by the accelerated rate of digital innovation and inherent market complexity. As a result, organizations have become reliant upon an ability of their people and leaders to embrace continuous change for strategic gain while delivering continuous, incremental value to customers. No longer is it good enough to pursue internal efficiencies alone, rather organizations are challenged to become more effective in product and service delivery through customer demand for high-involvement (and customization.) Companies in all industries seek to navigate their growing complexity using empirical process control, realizing predictive measures of cause and effect are not possible in much of the knowledge work we must engage in.

This reality explains why industries are making the shift to leverage lightweight organizational frameworks and agile methods that replace traditional approaches only suited for simple and complicated domains.

In this course we learn the history of agile methods, we explore Kanban, DevOps and, more deeply, the Scrum Framework, as it is the most popular around the globe, and sits at the root of most every enterprise framework used to "scale agility."

> • We teach what it means to be a modern Entrepreneurial Leader through effective
>
> Product Ownership.
>
> • We teach what it means to lead effective High-Performance Teaming through Self-Leadership, Values and Principles.
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> • We teach what kind of Leadership makes or breaks this in organizations big and small,
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> and offer many case studies, storytelling and deeper insights through in-class teaming
>
> exercises.

Who this course benefits:

High paying, strategic jobs of Product Owner and Scrum Master top the high-pay job boards and are in

high demand from all the major players and Fortune companies. Many students will find themselves becoming part of co-creative, cross-functional teams for strategic corporate initiatives.

Many are in pursuit of playing strategic Product Owner and Scrum Master roles, as well as supporting roles in Product management, development and delivery - if this is you, this is a course you really must consider - speak to your student network about the value this course will bring to your career goals.

Agile Methods is the perfect course for entrepreneurially-minded professionals having career aspirations within any departmental functions (such as Product Management, Product Development, Human Resources, Sales & Marketing, Finance, Supply Chain, etc.), and for those wanting to learn through practical application just how organizations deliver continuous value and lead continuous change.

Learning Objectives:

1. Students will gain hands-on skills and experience applying Agile Values and Principles, Agile Frameworks as they engage in using Scrum and Kanban during this course - both are popular agile methodologies in high demand with today's employers!

2. Students will be able to demonstrate critical thinking and applied problem solving against a complex holistic system of agile values, principles and practices, and challenges of scaling to the enterprise.

3. Students will learn the strategic business drivers and benefits of agile methods, and the inherent complexities companies experience while adopting and scaling agile to the enterprise.

4. Learning Scrum by using Scrum; through effective Teaming, and Leading Teams we learn what is required for results, how to amplify and accelerate.

Required Course Materials:

• Students are required to purchase the book (audio version is acceptable), "The Scrum Fieldbook – A Master Class on Accelerating Performance, Better Results and Defining

the Future".

• Each student will own a copy of the "Scrum Inc. - Scrum Master and Product Owner" courseware created by Dr. Jeff Sutherland (co-creator of Scrum and the

founder of Scruminc.com); student accounts will be charged $50 by CMU Administrators for

payment of the (student discounted rate) licensing fee. This includes a free attempt

at earning either the Scrum Inc. Product Owner - or – Scrum Inc. Scrum Master

certification at the conclusion of the course depending on your career goals.

Course Assessment Approach:

Students will be graded for their individual performance, based on the number of points earned

out of a total possible one hundred (100) points.

The course is heavily focused on scenarios-based exercises that require practical application of

what is being learned within teams. Grades are assessed for your individual quality of

contribution, participation level and demonstrated knowledge.

> • 35 Class Participation Points: Class participation points will be earned during Weeks 2-8
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> at a rate of up to 5 points per class, totaling 35 points. If you miss a class, you will
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> receive zero points. Students who miss class without prior approval of the instructor,
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> may not have the ability to earn make-up points. Attendance: Attendance and
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> participation are imperative to support learning through workshop, teaming, team
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> participation and classroom retrospective discussion. Students will receive full points by
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> demonstrably participating during in-class workshops and engaging in question/answer
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> discussion during lecture.
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> • 20 Individual Assignment Points: Throughout this course outside of classroom hours individual
> students will execute weekly Sprints using Scrum and Kanban to learn these Mindsets, Methods,
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> Teaming and Leadership. Points will be earned through individual assignments that advance the
> students knowledge and expanding their understanding of what is learned during class hours.
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> • 15 Quiz Points: There will be quizzes throughout the weeks used to help students assess
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> their knowledge and understanding, totaling up to 15 points of their total grade.
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> • 30 Team Assignment Points: Student teams are formed early-on during the course where
> teaming is practiced during class to learn a particular strategy, practice or technique. To create

an environment of applied learning that moves us beyond the realm of theory, teams will pick-up assignments to work together to deliver something of value using what has been learned.

Final Course Grade (Scale Using Possible Points Earned Out Of 100):

97-100: A+

93-96.99: A

90-92.99: A87-89.99: B+

83-86.99: B

80%-82.99%: B77%-79.99%: C+

73%-76.99%: C

70%-72.99%: C

Ethical Standards:

Students at Carnegie Mellon are engaged in preparation for professional activities of the highest standard. Each profession constrains its members with both ethical responsibilities and disciplinary limits. To assure the validity of the learning experience Carnegie Mellon establishes clear standards for student work. You are required to be familiar with related university policies on this subject. An extract of these policies is reproduced here: In any presentation, creative, artistic, or research, it is the ethical responsibility of each student to identify the conceptual sources of the work submitted. Failure to do so is dishonest and is the basis for a charge of cheating or plagiarism, which is subject to disciplinary action. Cheating includes but is not necessarily limited to:

- Plagiarism.
- Submission of work that is not the student's own for papers, assignments or exams.
- Submission or use of falsified data.
- Theft of or unauthorized access to an exam.
- Use of an alternate, stand-in or proxy during an examination.
- Use of unauthorized material including textbooks, notes or computer programs in the preparation of an assignment or during an examination.

• Supplying or communicating in any way unauthorized information to another student for the preparation of an assignment or during an examination.

• Collaboration in the preparation of an assignment.

• Unless specifically permitted or required by the instructor, collaboration will usually be viewed by the university as cheating. Each student, therefore, is responsible for understanding the policies of the department offering any course as they refer to the amount of help and collaboration permitted in preparation of assignments.

• Submission of the same work for credit in two courses without obtaining the permission of the instructors beforehand.

As a matter of policy, I will not tolerate cheating or plagiarism. If you are caught, you will automatically

lose all marks for that exam/assignment. I will decide whether further disciplinary action should also be

taken.