AGILE HANDS-ON: PRODUCT DEVELOPMENT WITH SCRUNM

COURSE OVERVIEW
Course Code: WSP 297
Quarter: Spring 2018
Instructor Names: Bernie Maloney and Laura M. Powers
Instructor Contact: Please contact the office for specific questions regarding this course

COURSE DESCRIPTION
The pace of change in markets & with technology challenges many businesses as well as established project management methods. Yet, some organizations not only survive amidst such disruptive change, they actually thrive. Organizations and projects that embrace the shift to Agile values, principles and practices are able to manage changing requirements and compress innovation cycles. All while experiencing improvements in project visibility, productivity and customer and employee engagement and satisfaction.

In this hands-on workshop, students will use Agile itself to learn and apply Agile and Scrum, the most widely used form of Agile. Short, focused presentations will cover the Values, Roles, Artifacts and Events comprising Scrum as well as concepts & practices including a shared Definition of “Done”, Backlog Refinement and team facilitation techniques. Students will reinforce those concepts through multiple immersive exercises, including a complex, multi-team simulated project which integrates the material. This dynamic workshop prepares students with skills, knowledge, behaviors and initial experience to not only explain Agile to clients or in interviews, but further to be change agents to help their teams and programs apply these concepts to become resilient, learning organizations able to thrive in today’s emerging markets.

COURSE OBJECTIVES
Using a combination of in-class group exercises, lectures and interactive discussion, this course seeks to provide hands-on experience in Agile Methodologies.

The benefits of an Agile approach versus more traditional development approaches will be explored, including a review of why some organizations fail to see the full benefit of their Agile implementation. The fundamental roles, activities and deliverables of an Agile framework will be introduced and actively used to teach the course. Examples and case studies of the practical application of Agile in a variety of businesses and organizations will be presented.
The workshop will culminate in a full simulation of an Agile project – giving the entire class hands-on experience will the roles, activities and challenges of being agile.

**Course Schedule:**
WSP 297  
Saturday & Sunday, 9:30 am – 4:30 pm  
May 5 & 6

**Required Text(s):** None

**Grade Options and Requirements:**
The true measure of our success is how you can apply the concepts presented into practice.

For No Grade Requested:
Just show up for class. This is the default grading option

For Credit, without Grade:
Attend both sessions. Sign class roster both days. Participate actively.

For Letter Grade:
Not offered

*Please Note: If you require proof that you completed a Continuing Studies course for any reason (for example, employer reimbursement), you must choose the Credit / No Credit option. Courses taken for NGR will not appear on official transcripts or grade reports.*

**COURSE OUTLINE**

**MODULE 1**

**LECTURE THEME: WHY AGILE?**
• Introductions & Expectation Setting
• The evolution of business – from simple to complicated to complex (Stacey Matrix)
• Agile versus Waterfall – which one when?
• What Kinds of Organizations use Agile & Why?
• Introduction to Workshop Tools – Task Board & Burn Chart
• Definition of Done & Roman Thumb Voting
• Group Exercise: Self-organizing teams
MODULE 2
LECTURE THEME: FOUNDATIONAL CONCEPTS IN AGILE & SCRUM
- The Big Picture – Agile Manifesto, Principles & Practices
- Agile versus Traditional Methods (Waterfall, or Stage Gate)
- Adaptive systems in Agile – creating customer value with practices that are experiential, iterative, incremental and transparent
- Scrum in a Nutshell – an overview of the roles, activities and deliverables in Scrum
- What about the Manager? The Role of Management in Agile
- Group Exercise: The Agile Dream Team

MODULE 3
LECTURE THEME: AGILE REQUIREMENTS
- How do Agile Requirements differ from more traditional approaches?
- Agile Requirement Deliverables – product backlog, sprint backlog, potentially shippable increments
- User stories – format, attributes and sizing of great user stories
- Evolution of agile requirements – from business roadmap initiatives and programs to epics, stories & tasks
- Group Exercise: The Agile Requirements Rodeo
- Retrospective on Day 1

MODULE 4
LECTURE THEME: ESTIMATION IN AN AGILE ENVIRONMENT
- Relative estimation versus absolute estimation of effort and time
- The Power of Fibonacci numbers
- Methods of Agile estimation
- Group Exercise: The Estimation Game
- Team velocity & Release Planning

MODULE 5
LECTURE THEME: THE RUBBER HITS THE ROAD – PRACTICAL APPLICATION OF AGILE
- The Satir Change Model – setting expectations and leading through the change cycle
- 5 Common Obstacles to the success of a new agile implementation and how to move your team beyond them
• “Be” not “Do” agile – Agile culture is key
• The care and feeding of high performing agile teams
• Open Frame: Q & A about applying agile

MODULE 6
LECTURE THEME: PUTTING IT ALL TOGETHER

• Group Exercise: Agile Simulation – a multi-team, full simulation of an Agile project, providing hands-on experience of the roles, artifacts and events of scrum
• Open Frame – questions
• Resources & What’s Next

Bernie Maloney, Agile Coach, Persistent Systems; Principal at GreenFieldZ

Bernie Maloney is an international speaker, coach and trainer who has helped grow businesses from break even to beyond $100 million in revenue. The self-directed teams he’s helped build have delivered award winning electronics and services, both to consumers and businesses. He has over 25 years of experience with firms including Bell Telephone Laboratories, HP, TiVo, and Good Technology. Leading passionately through influence rather than authority, he believes a little structure goes a long way, and that Accelerating Genius is possible in just about any leader, any team, and any class. He received a Masters of Science in Mechanical Engineering from Virginia Polytechnic Institute and State University.

Laura M. Powers, Founder & Principal, Powered By Teams

With 25 years of engineering and management experience, Laura has been involved in the design of aircraft engines, diapers, electric cars, as well as software systems at Hewlett Packard, Sales.com, and eBay. Ironically, the Lean concepts practiced eons ago at the start of her career have migrated into the world of software! As the founder of Powered By Teams, Laura uses proven frameworks, including Agile, to help teams create extraordinary results and exponential success while experiencing fun & joy.

Laura holds a B.S. and M.S. in Mechanical Engineering from Virginia Tech, as well as certifications as a Certified Scrum Professional, Certified ScrumMaster, Certified Scrum Product Owner, Certified Trainer of Training from the Back of the Room, and Certified Trainer and Master Practitioner of Neuro-Linguistic Programming (NLP).