Successful project management is the application of knowledge, skills and techniques to execute projects effectively and efficiently; on time and on budget. It is a strategic competency that enables organizations to leverage their strengths to overcome their weaknesses, exploit opportunities, and guard against threats. Project Management, whether traditional or agile, is one of the top skills demanded by successful organizations worldwide.

Course Description
The Sonoma State University Project Management Certification Course meets one night a week for 15 weeks. Upon successful completion of the course, students will receive a Certificate in Project Management from Sonoma State University. The course satisfies the educational requirements necessary to sit for the Certified Associate in Project Management (CAPM®) examination, the Project Management Professional (PMP®) examination, and the Agile Certified Practitioner (PMI-ACP®) examination. These exams and certificates are offered by the Project Management Institute (PMI) and are not a requirement of the SSU course, nor is the cost of the PMI examinations included in the tuition for the SSU course.

In addition to meeting the PMI formal education requirements, the SSU Project Management Certification Course provides hands-on training in the use of Microsoft Project, and an in-depth study of project management mathematics, both manually and with the use of Microsoft Excel.

Prerequisites: There are no prerequisites for the Sonoma State University Project Management Certification Course. Requirements for the PMI certificates may be found at www.pmi.org.

Course Learning Objectives
● Describe the difference between traditional and agile project management approaches and identify the appropriate methodology for different project and organizational situations.
● Define the input, tools and techniques, and output of each of the five project management process groups: Initiation, Planning, Executing, Monitoring and Controlling, and Closing.
● Define the input, tools and techniques, and output of each of the ten project management knowledge areas: Integration, Scope, Schedule, Cost, Quality, Resources, Communications, Risk, Procurement, and Stakeholders.
● Demonstrate proficiency if creating and maintaining Microsoft Project worksheets and reports.
● Demonstrate proficiency in solving common project management mathematical problems.

Required Course Materials (4 books)

Teaching Methods

Most class meetings will begin with a practice quiz on the subject of the prior weeks’ lecture and homework assignment, followed by a lecture and discussion. Microsoft Project assignments and Excel exercises may be completed on computers in the 24-hour laboratory at the students' convenience, or at the students home or work if they have access to the required software. Students should expect to spend 2 to 3 hours a week on outside reading assignments and between 10 and 20 hours on computer assignments during the 15-week course.

Evaluation Tools

This is a pass/fail course, based on points earned on the final exam and on the Microsoft Project assignments and Excel exercises. The last five of the Microsoft Project assignments are offered as extra credit. Individual extra credit opportunities will not be offered.

The final exam will include questions on traditional project management, agile project management, and project mathematics. A score of 65%, which equates to a letter grade of C, is required on both the final exam and on the Microsoft Project assignments for successful completion of the course.

Honesty, as defined in the Project Management Institute Code of Ethics and in Sonoma State University policy, is expected at all times. Any indication of cheating will result in course failure.

Schedule of Lectures and Homework Assignments

- **Week 1**
  - The Project Management Institute Code of Ethics
  - PMBOK: Chapter 1, Introduction to Project Management
  - Agile: Chapter 1, Introduction
  - Math: Pages 1 – 16, Introduction
  - MS Project: Chapters 1 & 2, Introduction and Guided Tour (no submission due)

- **Week 2**
  - PMBOK: Chapter 2, Project Environments
  - Agile: Chapter 2, An Introduction to Agile
  - Math: Pages 17 – 38, Budgets
  - MS Project: Chapter 3, Start a New Plan

- **Week 3**
  - PMBOK: Chapter 3, Role of the Project Manager
  - Agile: Chapter 3, Project Life Cycles
  - Math: Pages 39 – 58, Expected Monetary Value
  - MS Project: Chapter 4, Build a Task List
• Week 4
  o PMBOK: Chapter 4, Project Integration Management
  o Agile: Chapter 3, Mixing and Tailoring Approaches
  o Math: Pages 59 – 78, Present and Future Value
  o MS Project: Chapter 5, Set Up Resources

• Week 5
  o PMBOK: Chapter 5, Project Scope Management
  o Agile: Chapter 4, The Agile Mindset
  o Math: Pages 79 – 97, Internal Rate of Return
  o MS Project: Chapter 6, Assign Resources to Tasks

• Week 6
  o PMBOK: Chapter 6, Project Schedule Management
  o Agile: Chapter 4, Team Composition
  o Math: Pages 98 – 118, Scheduling
  o MS Project: Chapter 7, Format and Share Your Plan

• Week 7
  o PMBOK: Chapter 7, Project Cost Management
  o Agile: Chapter 5, Implementing Agile
  o Math: Pages 119 – 130, Procurement Math
  o MS Project: Chapter 8, Tracking Progress

• Week 8
  o PMBOK: Chapter 8, Project Quality Management
  o Agile: Chapter 5, Troubleshooting and Measurements
  o Math: Pages 131 – 146, Displaying Data, Continuous and Discrete
  o MS Project: Chapter 9, Fine-Tuning the Schedule

• Week 9
  o PMBOK: Chapter 9, Project Resource Management
  o Agile: Chapter 6, Organizational Considerations
  o Math: Pages 147 – 161, Forecasting, and 162 – 176, Regression Analysis
  o MS Project: Chapters 10 and 11, Fine-Tuning Tasks and Resources

• Week 10
  o PMBOK: Chapter 10, Project Communications Management
  o Agile: Chapter 6, The Project Management Office
  o Math: Pages 177 – 188, Risk Management, and 189 – 193, Make or Buy Analysis
  o MS Project: Chapters 12 and 13, Fine-Tuning and Organizing the Plan

• Week 11
  o PMBOK: Chapter 11, Project Risk Management
  o Agile: Annex A1, Mapping Agile to PMBOK
  o Math: Pages 194 – 219, Quality Management Tools
  o MS Project: Chapter 14, Detailed Tracking
Disabilities

Students who may require special accommodations must register with Disability Services for Students (DSS) before any such accommodations can be made.

University policy

There are important University policies that students should be aware of, such as the add/drop policy; cheating and plagiarism policy; grade appeal procedures; accommodations for students with disabilities; and diversity at SSU. These and other university policies may be found at http://www.sonoma.edu/uaffairs/policies/studentinfo.shtml.

Instructor

The course will be taught by Jim Robison. Doctor Robison has over 30 years’ experience in business management as director of supply chain, director of production control, materials manager, inventory manager, purchasing manager, accounts payable manager, and a distribution center office manager.

He has a Doctor of Business Administration (DBA) degree in Operations and Technology Management from Golden Gate University, a Master of Business Administration degree from Sonoma State University and a Bachelor of Science degree, in business and industrial management, from San Jose State University.
Dr. Robison is a Certified Fellow in Production and Inventory Management, CFPIM, and is Certified in Integrated Resource Management, CIRM; both certifications awarded by the Association for Supply Chain Management. He is certified as a Project Manager Professional, PMP, and an Agile Certified Practitioner (PMI-ACP) by the Project Management Institute. Jim also earned the Certified Purchasing Manager, C.P.M., designation from the Institute for Supply Management. He retired from the US Army Reserve, Field Artillery, as a Lieutenant Colonel.

He has been teaching business courses at Sonoma State University since 1999. In addition to traditional and agile project management, he frequently teaches business strategy, management information systems, operations management, and business statistics.

Communications

Office hours are 4:00 to 6:00 Monday, Tuesday and Wednesday in Stevenson 3006A.
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