REGIS UNIVERSITY

COLLEGE OF COMPUTER & INFORMATION SCIENCES

Syllabus

Course Number: CIS 448
Course Title: Business Project management

Course Description:

Provides a foundational and practical knowledge of project management principles. Identifies tools and processes for managing projects using both Waterfall and Agile methodologies.

Prerequisite Courses:

No prerequisite course(s).

Course Overview

- Project management is a balancing act requiring the utmost of those who profess to be practitioners. Project managers are equal parts leader, psychologist, financial managers, problem solvers, negotiators, subject matter experts, and administrators, sometimes having to employ each of those traits and skills at the same time to get things done.

- This course has been designed to provide you with a taste of two of the most prominent methodologies employed today for managing projects, Waterfall, and Agile. Despite those who would state otherwise, there are similarities to both methodologies for those who truly know how to make either system work correctly, and of course there are many differences. Throughout this course you will be given the opportunity to develop your own project plan as if you were the project manager of your own project and team. If you have years of project management experience then hopefully this course will help you to refine those hard fought for skills. If you have little to no experience then the content and resources provided herein will help guide you along the path.

- In the first four weeks of the course you will research and work to understand how the Waterfall methodology of project management flows, what the "Triple Constraint" is and how to work with stakeholders and team members effectively through use and deployment of control documents and communication plans.

- In the last four weeks of the course, you will research and work to understand the umbrella of Agile methodologies such as Scrum, XP, and Kanban. You will research and submit assignments on the similarities and differences between product owners, project managers, and Scrum Masters. You will also be given the opportunity to partner with other members of your class to develop your own Agile product as part of your final submission.

- Estimates vary and change year to year, but according to one source there are between 11.5 and 16.5 million project managers throughout the world (Garrett, 2017). Hopefully by the end of this course you will have an appreciation for the art and science of project management and

consider your own adventure in this wonderful world of opportunities.

- Upon completion of this course, learners should be able to:

- Define the key differentiating characteristics of Project Management methods, demonstrate understanding of the process of initiation, selection, and defining of a project

- Demonstrate the appropriate use of Waterfall vs. Agile project methodologies

- Define and control Stakeholder communication needs and channels

- Work in a group setting to complete course assignments

- Flow the accepted project activities with considerations of costs, schedules, and risks

- Define estimating techniques for resource needs per activity

- Estimate costs of activities and resources and formulate needed budgets while identifying the economic aspects of projects

- Integrate task deadlines, budgets considerations, resource availability, technological requirements precedent relationships, and schedules to provide project execution and initial control while demonstrating the use of MS Project

- Use control systems to detect current deviations, and forecast future deviations between actual progress and project plans, trace the source of deviations, and make decisions to put the project back on course, including defining and implementing techniques for handling risk

- Implement an integrative notion of the organizational breakdown structure and the work breakdown structure with detailed planning and control

Course Materials:

Required Texts:

Schwalbe, K. (2016). *Revised an Introduction to project management* (rev. 5th Ed.). Schwalbe Publishing. ISBN13: 978-1533000781 ISBN10: 1533000786.

Project Management Institute (20173). *Project management body of knowledge* (6th Ed.)*. Newtown Square, PA: Author. ISBN-978-1-62825-184-5.

Project Management Institute (2017). *Agile Practice Guide*. Newtown Square, PA: Author. ISBN: 978-1-62825-199-9

Note: Please note that a PMI membership is not required for this course but it is highly encouraged. You will be able to complete the course without a membership.

Recommended Resources:

American Psychological Association (current edition). APA Publication Manual. Retrieved from http://www.apastyle.org/.

Membership with Project Management Institute (www.PMI.org); be sure to apply for the student membership.

Templates can be found at, www.PMI.org, and Project Management Docs.

Library Tutorials:

Research Tutorials (n.d.). Regis University Library: see http://libguides.regis.edu/tutorials.

Computer and Information Science Research Tutorial, see https://mediaspace.regis.edu/media/Regis+Library+-+Resources+for+computer+and+information+science+/0_blk905nh/10579702

Technology Tools:

Adobe Acrobat Reader

RealPlayer (to watch the video presentations)

Microsoft Project 2010 – you can obtain a free copy of Microsoft Project 2010 through our academic alliance with Microsoft (MSDNAA). Please email the MSDNAA Administrator (msdnaa@regis.edu) with your name and course number to gain access to MSDNAA.

Optional software:

Purdue Online Writing Lab (OWL). Retrieved from https://owl.english.purdue.edu/owl/section/2/10/.

Google Hangout for Web meetings/calls

Microsoft Lync for Web meetings/calls

Week One Assignment:

Online Format:

- Read Schwalbe (2016), chapter 1,2, 3 PMBOK® chapter 1, 2, 3
- Academic Integrity, and Facilitator Expectations Acknowledgement
- Discussions:
  - o 1. Using your course text, scholarly references, and the PMBOK 6th ed., describe in your own words what it takes to be an effective project manager.
  - o 2. Describe in your own words the definition of the "Triple Constraint". Further, explain how changes in one area impact the other two.
- Individual: Select a project and Submit to Dropbox

Pre-Assignment Due Dates:

Online Format: The facilitator will specify the due date for assignments.

Course Assignments and Activities:

	Topics	Readings	Activities Assignments
1	Introduction to project	Schwalbe (2016) chapters 1, 2, & 3	**Discussions:** a. Introduction

	management; project, program, and portfolio selection; initiating projects	PMBOK ® (2017) chapters 2 & 3	b. Facilitator Expectations c. Discussion(s) **Individual:** a. Select your individual project and submit to Dropbox for instructor feedback (Pass or Fail assignment)

2	Project Integration Management and Agile Methodology	Schwalbe (2016) Chapters 6, 7, & 8
		PMBOK ® (2017) chapters 3, 4, & 9
			Discussions:
			a. Communications discussion
			
			Individual:
			1. Submit your project plan with applicable items below your respective group discussion forum as an attachment in a new discussion thread.
			    a. An executive summary of the genesis of the project, the intent, and intended consumer
			    b. Project Charter
			    c. Project Scope document
			    d. Communication plan
			    e. Stakeholder Matrix (RACI)
			2. Select two of your peers assignment from your assigned group to review. Post your feedback on their respective initial discussion post. Please remember to keep your feedback factual, specific, and concise

3	Project Management Scope, Risk Analysis, and Change Management	Schwalbe (2016) chapters 4 & 5 PMBOK ® (2017) chapters 5, 11, & 12	**Discussions:** a. Video discussion - project communication **Individual:** 1. Submit your updated project plan with peer feedback changes incorporated to the Dropbox for facilitator review and feedback (Pass or Fail assignment)

4	Project Cost Management, Quality Management, and Waterfall Project Management Plan	Schwalbe (2016) Chapters 5.9, & 10 PMBOK ® (2017) chapter 6, 7, & 8	**Discussions:** a. Video discussion – Work Breakdown Structure **Quiz Week 4** **Individual:** a. Submit your individual Waterfall project plan
5	Waterfall Project Management versus Agile Methodology	Principles behind the Agile Manifesto http://agilemanifesto.org/principles.html Scrum Alliance https://www.scrumalliance.org/?gclid=CjwKEAiAtefDBRDTnbDnvM735xISJABlvGOvnwM4qw_LXUwV7Zd-_hEwMzuISEVsulledMN9Bwv9fRoC35Hw_wcB Agile Practice Guide (2017). Chapters 2, and 3 Appendix A2	**Discussions:** a. In your opinion, which of the 12 principles of the Agile Manifesto are adhered to most faithfully? Which of the 12 principles are violated the most? If you do not have any experience with Agile or these principles in a project setting, please take your best guess. b. From your research how could your organization benefit from using an Agile methodology? **Individual:** a. In a two to three using proper APA formatting and styling, compare and contrast Waterfall vs Agile methodologies, and answer the question, "Is there still value in holding a PMP certification in an Agile world?"
6	Product Owner versus Scrum Master Role	Agile Alliance https://www.agilealliance.org/ Scaled Agile Framework http://www.scaledagileframework.com/product-owner/ Agile Practice Guide (2017). Chapter 4	**Discussions:** a. Research no less than two methods used for sizing backlog items. Describe the methods and determine which method would work best for your organization and explain why. b. In your opinion is a Scrum Master a leader or a facilitator? Please provide a rationale for your point of view. Ensure you provide no less than two scholarly references to support your view

			Individual:
			In a two to three page paper compare and contrast the role of a business sponsor in waterfall methodology versus a product owner in an Agile initiative. Provide your rationale for which role is most suited to successful project completion.
7	Agile Project Proposal	Atlassian Agile https://www.atlassian.com/agile/program Agile Practice Guide (2017). Chapters 5 and 6, Appendix A3	**Discussion:** a. From your research describe in your own words whether an Agile Sprint is or is not a mini-waterfall process. Please justify your answer. 1. Describe how human resource management differs from Waterfall projects versus Agile projects. a. What do you do for your teams when there is downtime? 1. How does multi-tasking either enhance or detract from team productivity**?** **Group:** a. Submit a project proposal to your instructor no later than Wednesday of Week 7.
8	Final Project Submission		**Discussion:** a. Course reflection – provide input on course content and assignments in the discussion forum, no peer-to-peer responses required **Quiz Week 8** **Group Work and Evaluations:** **a.** Submit your final group assignment to the Dropbox **Individual:** a. Submit a 1-2 page retrospective on the Agile process, include a peer evaluation for your group members.

Individual Project Weeks 1-4:

Your tasks are to create a final project document discussing HOW you intend to execute your chosen group and or individual project. Within your paper, you will discuss your plans to monitor the project, handle changes, develop the project budget, arrange for and manage human resources, provide for effective and ongoing communications between all stakeholders, and plan for and manage risks. The tasks referenced above are also applicable to the group project.

Your final Individual Project is due at the end of Week 4 and the Final Agile Team Project is due at the end of Week 8. The guidelines for the individual project, week 4 submission, are outlined below.

- Introduction
- Project Integration Management
    - o Project Charter
    - o Change Control Procedures
- Project Communications Management
    - o Stakeholder communications analysis
- Project Human Resources Management
    - o Responsibility Assignment Matrix (RAM)
- Project Scope Management
    - o Project Scope Statement
    - o Work breakdown Structure
    - o Requirements Traceability Matrix (RTM)
- Project Time Management
    - o Precedence Diagram Network Diagram
    - o Project schedule (Gantt Chart) using MS Project
- Project Cost Management
    - o Estimated costs spreadsheet
- Project Quality Management
    - o Flow Chart that displays the logic and flow of processes
    - o Test plan and approach
- Project Risk Management
    - o Risk Register
- Conclusion

Agile Team Project:

Your Agile Team Project proposal needs to be approved by the course facilitator no later than the

middle of week 7 and the completed Agile Team Project is due the end of week 8.

Please note that the final group project can be submitted as a written or video presentation but should at a minimum contain the following:

- Introduction with a clear statement of the high level business need stated from a user's perspective
- An explanation of the intended solution
- An example of the User Stories created to fulfill the business request complete with story points and subtasks
- A slide deck or video presentation demonstrating the proposed product
- A written one to two page brief retrospective describing what went well with the group project and what could have been improved upon if done again, this retrospective should also include a peer evaluation of your group members. **NOTE: The Retrospective is an individual assignment submission.**

Student Evaluation Grid:

Assignment	Value (percent of overall course grade)
Discussions (Initial & Peer-to-Peer postings)	**30%**
Individual Assignments	**35%**
Quizzes	**15%**
Group Assignments and Peer Evaluations	**20%**
Total	**100%**

CC&IS Grading Scale:

Letter Grade	Percentage	Grade Point
A	93 to 100	4.00
A–	90 to less than 93	3.67
B+	87 to less than 90	3.33
B	83 to less than 87	3.00
B–	80 to less than 83	2.67
C+	77 to less than 80	2.33
C	73 to less than 77	2.00
C–	70 to less than 73	1.67
D+	67 to less than 70	1.33
D	63 to less than 67	1.00
D-	60 to less than 63	.67
F	Less than 60	0

Additional information about grading can be found in the latest edition of the University Catalog, available at http://www.regis.edu/Academics/Course%20Catalog.aspx.

CC&IS Policies and Procedures

Each of the following CC&IS Policies & Procedures is incorporated here by reference. Students are expected to review this information each term, and agree to the policies and procedures as identified here and specified in the latest edition of the University Catalog, available at http://www.regis.edu/Academics/Course%20Catalog.aspx or at the link provided.

- The CC&IS Academic Integrity Policy.

- The Student Honor Code and Student Standards of Conduct.

- Incomplete Grade Policy, Pass / No Pass Grades, Grade Reports.

- The Information Privacy policy and FERPA. For more information regarding FERPA, visit the U.S. Department of Education.

- The HIPPA policies for protected health information. The complete Regis University HIPAA Privacy & Security policy can be found here: http://www.regis.edu/About-Regis-University/University-Offices-and-Services/Auxiliary-Business/HIPAA.aspx.

- The Human Subjects Institutional Review Board (IRB) procedures. More information about the IRB and its processes can be found here: http://regis.edu/Academics/Academic-Grants/Proposals/Regis-Information/IRB.aspx.

The CC&IS Policies & Procedures Syllabus Addendum summarizes additional important policies including, Diversity, Equal Access, Disability Services, and Attendance & Participation that apply to every course offered by the College of Computer & Information Sciences at Regis University. A copy of the CC&IS Policies & Procedures Syllabus Addendum can be found here: https://in2.regis.edu/sites/ccis/policies/Repository/CCIS%20Syllabus%20Addendum.docx.