CS 620 Global IT Project Management

Bentley University Computer Information Systems Department Spring 2017

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Office Hours Smith Technology Center 418

Tuesdays 3:30-4:30 PM and by appointment

Objectives

Students will develop their ability to manage complex, globally distributed IT projects in a variety of business models. They will be able to apply appropriately robust methodologies to manage projects, and then communicate and interact effectively with the range of stakeholders necessary to make the projects successful.

Catalog Description

This course provides the technical knowledge and skills for successfully managing and executing globally distributed IT projects. Topics covered include proposal and contract management, risk management, requirements management, user-centered design management, standards adherence, standards management, configuration management, project planning, effort estimation and scheduling, project monitoring and control, project audits, project closure, peer review, stress testing, quality planning, defect estimation and quality assurance. Students will learn the methods and tools that support these processes, develop a tool-kit for creating a project plan for a distributed application, and engage in a project to improve these IT project management capabilities of a globally distributed IS organization systematically. Prerequisites: none.

Course Overview

The course will be an interactive discussion of software project management, supported by readings and case studies. The discussion will be among all members of the class, not just each student individually with me. Since every voice is essential, attendance is expected of all students for all sessions. As a group, we benefit from the presence of practitioners as students.

There are four components to the course grade:

Class participation 40% Assignments 20% Midterm exam 15% Final exam 25%

Class Participation

Please note: the legalistic, petty policies outlined below do not reflect my preferred way of operating. Unfortunately, it is difficult to enforce policies that contain any measure of ambiguity.

The course, particularly the cases, will involve interactive discussion. The weighting of the grade reflects the importance of student participation. There are two components to participation: quality and quantity.

The quality of comments will be judged by relevance, clarity of thought and insight. As far as quantity, as a rule of thumb, I would expect to see your hand raised many times in each class and you should participate substantively at least once each class. If you feel you are having difficulty doing so, please let me know.

There is absolutely no substitute for class participation. Under no circumstances will extra credit be offered. No communication in any form outside of class discussion time counts in any way as class participation. After week 5, you will have an opportunity to provide a self-assessment of your participation and receive feedback.

To facilitate everyone learning and using the names of participants, you will be provided with a name card at the first class session. You are responsible for bringing the name card to all subsequent sessions. If you do not have a name card in class, you will not be able to participate in the discussion, and will receive a zero for that session. There is a template on Blackboard for creating a replacement if you lose your card.

Assignments

There will be individual and group assignments. Details will be provided during the semester.

Exams

Both exams are open book, with materials limited to those assigned in the course and your notes.

Academic Honesty

I chose an academic career because I enjoy teaching and learning from students. I have no interest in serving as a police officer. Such roles should be limited to primary education, if that. However, I often encounter lapses in academic honesty that I am obligated to address. In an effort to keep this from becoming an issue, I offer the following policy for CS620 which I assure you will be enforced.

This course has a zero tolerance policy for academic dishonesty. There is no room for such behavior in a graduate course, in the workplace, or in civilized society. I am unwilling to discuss rationale or circumstances for lapses. All breaches of academic honesty will result in the same penalty: an F in the course, and recommendation of expulsion from the graduate program. If you are unclear about what constitutes academic dishonesty in a paper, consult your student handbook, or ask me.

Any student using materials or notes from a previous semester or discussing a case study with someone who has previously discussed the case in this or any other course, or any student with knowledge of others doing so but not reporting it, will receive an F in the course and recommendation of expulsion from the graduate program. Please note, this is a more stringent standard than in most courses, but will be adhered to.

Books and readings

- There are three required texts for the course:
 - Charles Cobb, "The Project Manager's Guide to Mastering Agile: Principles and Practices for an Adaptive Approach," Wiley, 2015. ISBN 978-1118991046. (Also available as an ebook).
 - Richard Fairley, "Managing and Leading Software Projects." Wiley, 2009 ISBN 978-0-470-29455-0. (Also available as an e-book).

- Nick Morgan, Power Cues, Harvard Business Review Press, 2014. ISBN 978-4221-9350-1. (Also available as an e-book).
- There are additional readings listed in the schedule below.
- There are four case studies available for purchase from Harvard Business School Publishing at http://cb.hbsp.harvard.edu/cbmp/access/57308531

Please note that each student is required to purchase all cases; "sharing" cases is a violation of HBS copyright.

Schedule

Session	Date	Topic	Readings
	Thursdays (17:00-19:20)		
1	January 19	Role of projects and PMs	 A. Apfel, "Not Everything is a Project," Gartner, 17 October 2013. M. Light, Business System Analyst and Project Manager: Collaborate or Combine?" Gartner, 12 June 2012. M. Hanford, "Where Your PPM Career Won't Be in 2020: Project Managers Must Reinvent Themselves for the Digital Future," Gartner, 29 October 2015. M. Schoen and J. Santos, "Critical Soft Skills for Effective PMO Leadership," Gartner, 15 July 2016. "Developing talent for large IT projects," McKinsey & Company, August 2014. http://www.mckinsey.com/Insights/BusinessTechnology/Developing talent for large IT projects?cid=other-eml-alt-mip-mck-oth-1408.
2	January 26	Projects in context	 Cobb, Chapter 1. Fairley, Chapters 1, 2, Appendices 1A, 2A, 2B. Power Cues, Introduction and Chapter 1. Begin your body language diary. Case: Big Spaceship: Ready to Go Big? Preparation questions: What are the defining features of the industry in which Big Spaceship competes? Who are its competitors? What is Big Spaceship's value proposition to customers? How do their organization structure, culture, and human resource practices support their strategy? Is Big Spaceship ready to go big? Why? Why not? What are the strengths and weaknesses of Big Spaceship's strategy? If you were Michael Lebowitz, what would you do to ensure they can grow sustainably?

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	F-12			syllabus spring 2017 lev. 17 December 2010/ rage 4 01 0
3	February 2	Selecting a software		Cobb, Chapters 2, 3, 4, 6.
		development process		A. Kyte et al, "A Primer on Technical Debt,"
			(Gartner 05 October 2016.
			• 1	M. West and L. Wilson, "Survey Analysis: How
			P	Agile in the Enterprise Stumbles, Evolves, Then
				Succeeds," Gartner, 24 March 2016.
4	February 9	Project planning		obb, Chapter 8, 19.
	_		 P 	ower Cues, Chapter 2.
				airley, Chapter 3 (Read only 3.5: Process
				oundations, pp. 109-112), Chapter 4, Appendices
				A, 4B, Chapter 5, Appendix 5A.
				Fitgerald, "PMO Leaders Can Improve Project
				elivery With Better Resource Management,"
				artner, 29 November 2016.
5	February 16	Estimation		Power Cues, Chapter 3.
	1 cordary 10	Estimation		
				Cobb, Chapter 7.
				Gairley, Chapter 6, Appendix 6A.
				D. Giudice, "Agile Metrics that Matter,"
				Forrester, September 9, 2013.
				M. Hotle, "Best Practices in Application
				Development Estimation," Gartner, 12 May 2009.
			• 1	M. Hotle, "How to Choose a Sizing Framework to
			N	Measure Productivity," Gartner, refreshed 26
			N	March 2014 (original publication date 2 October
			2	2012).
6	February 23	Quality assurance,	• <i>F</i>	Power Cues, Chapter 4.
		status		Cobb, Chapter 5, 9, 11.
			• F	Fairley, Chapters 7, Appendices 7A, 7B, 8.
				D. Guidice and M. Vistacion, "Consistent
				Performance In Agile Teams Must Include
				Sesting," Forrester, 17 January 2013.
7	March 2	Midterm exam		, , ,
	l	March 9 - No c	lass (spring break)
8	March 16	Risk management		ower Cues, Chapter 5.
				airley, Chapter 9, Appendices 9A, 9B.
				. Westerman and R. Hunter, "Developing a
				ommon Language About IT Risk Management,"
				ine 2009. http://cisr.mit.edu/research/research-
			-	verview/classic-topics/it-related-risk/ (free
				egistration required).
				ase: BAE Automated Systems (A): Denver
				nternational Airport Baggage Handling System.
				reparation questions:
			Г	Evaluate the implementation of the
				Denver International Airport Baggage-
				Handling System. What do you believe
				were the top 3 factors that contributed to
				the project's failure?
0	Morah 22	Tooms / distable 1		Who do you feel is most at fault and why?
9	March 23	Teams/distributed	• <i>F</i>	Power Cues, Chapter 6.

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		development	•	Fairley, Chapter 10, Appendix 10A.
		pmont	•	H. Huntley, "Ten Best Practices When Using
				External Staff Augmentation, Contractor or
				Temporary IT Resources," Gartner, refreshed 04
				July 2016.
			•	M. Visitacion, "Best Practices: Five Strategies for
				Leading Diverse Distributed Teams to Success,"
				Forrester, 29 October 2010.
			•	N Barton et al, "Managing Distributed Agile With
				Outsourced Service Providers," Gartner, 03 October 2016.
			•	N. Barton et al, "How to Contract for Agile Development Services," Gartner, 01 October 2015.
			•	F. DiCapua, "Prepare for Outsourcing Agile
				Application Development to Avoid Imminent
10	March 30	Mostingfacilitation		Failure," Gartner, 26 September 2016
10	Mai Cii 30	Meeting facilitation, communication	_	Power Cues, Chapter 7 and Conclusion.
11	April 6	Relationship	•	Cobb, Chapter 21.
	iipiii o	management	•	C. Long, "To Create Value, Understand Your
		munagement		Client," Journal of Management Consulting,
				November 1999, 10:4, pp. 12- 19. Available in
				ProQuest Research Library at
				http://search.proquest.com.ezp.bentley.edu/d
				ocview/215897424?accountid=8576&title=To
				+create+value%2C+first+understand+your+cli
				ent#.VR8m8blVdAY.email.
			•	H. Colella and A. Rowsell-Jones, "A Practical
				Guide to Stakeholder Management," Gartner,
				refreshed 8 July 2015.
			•	H. Colella, "Effective Communications: How to
				Develop a Communications Plan," Gartner,
				refreshed 21 January 2016.
			•	John J. Gabarro and John P. Kotter, "Managing
				Your Boss," <i>Harvard Business Review</i> , January
				2005, pp. 92-99. Available through EBSCO at
				http://search.epnet.com/login.aspx?direct=true
				<u>& db=buh&an=15524513.</u>
12	April 13	Staffing and managing	•	Fairley, Chapter 11.
		developers	•	Carol Hacker, "Maintaining Positive Relationships
				When Giving and Receiving Critical Feedback,"
				Information Systems Management, Fall2003, Vol.
				20 Issue 4, p77-79, available online at
				http://search.epnet.com/login.aspx?direct=true
				&db=buh&an=11016195. Note: From off
				campus, you need to log into EBSCO through
				Baker Library, then search for the article.
			•	Case: Scrums, Sprints, Spikes, and Poker: Agility
				in a Bulgarian Software Company

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1. What are the critical factors in Telerik's culture? 2. What challenges will Telerik face with continued growth? 3. What changes will be necessary for Telerik to succeed? 4. Cobb, Chapters 12-17, 20. 5. M. Visitacion "PMOs in the Age of the Customer," Forrester, 28 May 2014. 6. M. Visitacion, "Increase Your Value: Become The Modern, Agile PMO," Forrester, 26 August 2016. 7. M. Light. "How Activist PMOs Streamline Processes, Protect Users, Raise Stakeholder Value and Improve Governance," Gartner, 03 October 2016. 7. Cobb, Chapter 22. 7. N. Wilson, "Maverick Research: Fire Two-Thirds of Your IT Organization," Gartner, 25 September 2014. 7. Case: Foremostco, Inc. 7. Preparation questions: 7. Why did this project get into so much trouble? 7. How would you have ensured that progress was being made in the development of the new system? 7. Under what circumstances would you write your own software rather than buying packaged software? 7. During implementation, what might you have done to prepare employees for the				CS620 syllabus spring 2017 rev. 17 December 2016/Page 6 of 6
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System change:				system change?
5. What will you do to recover from the crisis				
described at the end of the case?				
15 May 4 Final exam	15	May 4	Final exam	