INFO 6245: PLANNING AND MANAGEMENT OF INFORMATION SYSTEMS DEVELOPMENT

[IT/IS PROJECT MANAGEMENT]

SPRING 2024

Instructor: Shirali Patel, D.Eng., PMP
E-mail: shi.patel@northeastern.edu
Class time: Friday, 5:00 – 8:00 pm (Boston), 2:00 – 5:00 pm (Seattle)
Office Hours: Virtual, upon request

Course Description

Provides an overview of the most popular information systems needs' assessment methodologies including portfolio analysis, stage assessment, business systems planning. Topics include utilities Information Systems strategic plan prioritization techniques of business goal alignment, architectural compatibility, and cost/benefit and risk analysis to demonstrate how businesses match needs to budgetary constraints. Describes and evaluates options for the placement of the Information Systems function within the organization and a variety of methods to manage the function. Introduces a generic application development and project planning methodology used as a model to facilitate the development of a four-stage project plan for a prototype project. Uses the Project Management Institute's PMBOK and Harvard Business School case studies extensively.

Course Learning Objectives

Project management has seen widespread application in the fields of engineering, construction, and defense. Nowadays, software product development firms are increasingly leaning on proficient project management techniques and robust software engineering practices to successfully launch their products in today's fiercely competitive market.
After successfully completing this course, students will gain a comprehensive understanding of the Project Management role, especially for information technology systems, and cultivate the necessary skills for effective project execution:

- Assumes the role of a professional project management practitioner, applying principles and practices while upholding high ethical standards and maintaining professional integrity through a commitment to lifelong learning.
- Demonstrates proficient written, verbal, and non-verbal communication skills, employs industry-specific terminology, produces various Project Management documents and plans, effectively manages project communication processes (including the timely handling of project information), and leverages appropriate technology for the task.
- Utilizes interpersonal skills to oversee project human resources, including team organization, management, and leadership, applies effective strategies to influence others, manages conflicts, and leads teams to successful project completion.
- Recognizes and upholds the significance of the project manager, sponsor, and customer roles, demonstrating commitment to their influence and contributions.
- Applies well-established frameworks and best practices in project management, encompassing the project management lexicon, organizational factors, operational considerations, strategic planning, portfolios, programs, project life cycles, and project management cycles.
- Applies project management processes for project initiation, planning, execution, monitoring, control, and closure, effectively coordinating all project elements.
- Proficiently manages projects, including scope, schedule, budget, and quality, ensuring alignment with the project's intended objectives.
- Implements processes necessary for project procurement, encompassing the acquisition of external goods and services.
- Effectively manages project risks, encompassing risk identification, analysis, and response.
- Analyzes and manages stakeholder expectations and engagement to ensure the successful outcome of the project.
- Strategically applies project management principles in diverse organizational and international contexts.

Reading Materials
- **TEXTBOOK:** Kathy Schwalbe, "Information Technology Project Management.9th Edition. (2019)
- A Guide to the Project Management Body of Knowledge (PMBOK® Guide)—Seventh Edition
- Agile Practice Guide by Project Management Institute, published by Project Management Institute

Communication

Canvas will be the main portal for this class.

- **Announcements:** I will use the Canvas communication tools to post announcements for each week and to share any time-sensitive updates. Please turn the announcement notifications on in Canvas settings to receive announcements in email, to help keep on top of late-breaking developments.
- **Q&A:** Use the discussion thread "General Course Q&A" for any content and assignment related questions.
- **Email:** All students can reach me at shi.patel@northeastern.edu. You can expect a response within 24 hours usually.
- **Office Hours:** I am available for consultation over the phone or through videoconference. Please email me to schedule an appointment.

Grading

Class Participation:	13%	(13 classes, 1% each)
Homework Assignments:	55%	(11 Assignments, 5% each)
Final Exam:	30%	(Quantitatively Graded)
Class Review:	2%	Submit a review for the class, professor, syllabus, course content, etc.

Grading/Evaluation Standards

Late submission of assignments with deadlines will receive credit deductions. The assignment grade is lowered by 1% for one-day delay and 2% after that. No submissions accepted beyond one week after the due date.

Academic Integrity

All work done for this course that is either written or presented orally is expected and assumed to be the original work of the student. Any material handed in that is copied/pasted from any source whatsoever (including but not limited to books, magazines, and internet sites) and not properly cited will be considered plagiarized. This practice is expressly prohibited, and

any student found to have turned in such material will receive an automatic F for this course. No opportunity will be given to any student to re-do any such work.

Class Attendance & Participation

It is important for students to take part in this class by reading the assigned material and coming to class prepared to discuss it. Class attendance is critical for a robust learning experience and is required aside from irrevocable circumstances like sickness or work emergencies. If you are not able to attend a particular class session, please email me in advance. Please note that you are responsible for catching up with the class in your absence; please work with the TA to address any material you may have missed.

Professionalism

- It is essential that students are respectful and engaged in class content. During class discussions, be willing to speak up and support your point of view, and—at the same time—be willing to hear what others have to say, even when their view differs from yours. It is important to keep a discussion focused on the topic at hand.
- Please use technology minimally during class. The use of technology other than as necessary for the class is disruptive for you, your classmates, and the instructor. One way to get participation grades is to pay attention and stay focused.

Syllabus

The syllabus provides an overview of the course and its expectations. **Please note** the syllabus is subject to change.

Class	Date	Topic	Discussion Points	In-Class Exercises	Assignment
1	1/12/2024	Introduction	• Class Syllabus & Expectations • Class Expectations • Intro to Project Management • Project, Program, & Portfolio • Project vs Product Management • IT Project Manager's Role & Skills • IT/IS PM Profession	Introductions	Read Chapters 1 & 2
2	1/19/2024	Systems View Systems Approach	• Systems View • Project Process Groups • *Simulated Project Synopsis for in-class exercises*	EX: Form teams and Identify a Simulated Project for in-class exercises	Read Chapter 3 & 4 ASSN#1: Chapter 3 Case Study (JWD Consulting). Exercise 4, page 147
3	1/26/2024	Integration	• Strategic Planning • Project Selection • Project Charter & Management Plan • Integrated Change Control	EX: Project Charter & Management Plan	Read Chapter 5 ASSN#2: Chapter 4, Case Study (BIOTECH Project) Exercise 1, page195
	2/2/2024	**NO CLASS**	• **Professor Unavailable**		
4	2/9/2024	Scope	• Requirements Collection • Scope Management • Development Approach Considerations	EX: Work Breakdown Structure	Read Chapter 6 ASSN#3: Chapter 5, Exercise 1, Page 236

5	2/16/2024	Schedule	• Schedule Management • Gantt Charts • Critical Path • Agile Schedule Management	EX: Gantt Chart	Read Chapter 7 ASSN#4: Chapter 6, Exercise 11, Page 282
6	2/23/2024	Cost	• Principles of Cost Management • Estimating Costs • Determining Budget • Controlling Costs	EX: Budgetary Estimate	Read Chapter 8 ASSN#5: Chapter 7, Exercise 4, Page 320
7	3/1/2024	Quality	• Planning Quality Management • Managing Quality • Controlling Quality • Improving IT Project Quality	EX: Test Cases	Read Chapter 9 ASSN#6: Chapter 8, Exercise 7, page 369
	3/8/2024	**Holiday**	• **Spring Break**		
8	3/15/2024	Resources	• Managing and Leading People • Resource Management Plan • Developing the Project Team • Managing Project Teams	EX: Team Org Chart & RACI	Read Chapter 10 ASSN#7: Chapter 9, Exercise 1, Page 419
9	3/22/2024	Communications	• Keys to good communications • Planning communications Management • Managing communications • Monitoring communications	EX: Stakeholder Communications Plan	Read Chapter 11 ASSN#8: Chapter 10, Exercise 1, Page 459
10	3/29/2024	Risk	• Risk Management Plan • Identifying Risks • Risk Analysis • Risk Responses	EX: SWOT Analysis	Read Chapter 12 ASSN#9: Chapter 11, Exercise 4, Page 500
11	4/5/2024	Procurement	• Planning Procurement Management • Conducting Procurements	EX: Make-Buy Analysis	Read Chapter 13

			• Controlling Procurements		ASSN#10: Chapter 12, Exercise 6, Page 536
12	4/12/2024	Stakeholders	• Recognizing Project Stakeholders • Stakeholder Engagement • Managing Stakeholders • Monitoring Stakeholders	EX:	Review PMBOK 7th Edition ASSN#11: Chapter 13, Exercise 3, Page 559
13	4/19/2024	PMBOK 7th Edition	• Project Management Principles • Project Performance Domains • Tailoring • Models, Methods, Artifacts	Review for Exam Prep	Review for Exam Prep
14	**4/26/2024**	**Final Exam**	**Full Syllabus**		