



INFO 6245: PLANNING AND MANAGEMENT OF INFORMATION SYSTEMS DEVELOPMENT

FALL 2025

Course Information

Course Title: Planning and Management of Information Systems Development

Course Number: INFO 6245

Term and Year: Fall 2025

Credit Hour: 4

CRN: 17692

Course Format: Online

Instructor Information

Full Name: Shirali Patel, D.Eng., PMP

Email Address: shi.patel@northeastern.edu

Office Hours: TBD

Instructor Biography

Shirali Patel is an adjunct faculty member at Northeastern University, based at the Arlington Campus. With over 20 years of experience as a systems engineer, program and product manager, Shirali brings a wealth of knowledge and practical expertise to her students. She holds a Doctorate in Engineering Management from George Washington University and currently serves as a Director of AI Sales Management at Microsoft. In this role, she leads a team responsible for launching M365 Copilot Products for Government customers. In addition to her professional accomplishments, Shirali is a proud US Airforce veteran, bringing a unique perspective and discipline to her work and teaching.

Teaching Assistant Information

Full Name: TBD

Email Address: TBD

Office Hours: TBD

Communication

Canvas will be the main portal for this class.

- **Announcements:** I will use Canvas communication tools to post announcements and 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.

Course Prerequisites

No prerequisite

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 real-world case studies extensively.

Course Learning Outcomes

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, and 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.

Required Tools and Course Textbooks.

- 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

Course Schedule/Topics Covered.

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

Class	Topic	Discussion Points	In-Class Exercises	Assignment
1	Introduction	<ul style="list-style-type: none"> ● Class Syllabus ● Class Expectations ● Intro to Project Management ● Project, Program, & Portfolio ● Project vs Product Management ● IT Project Manager’s Role & Skills ● IT/IS PM Profession 	EX: Form teams and Identify a Simulated IT/IS Project for in-class exercises	Read Chapters 1 & 2

2	Systems View Systems Approach	<ul style="list-style-type: none"> • Systems View • Project Process Groups • <i>Simulated Project Synopsis for in-class exercises</i> 	EX: Each team will present their chosen project for the semester	Read Chapter 3 & 4 ASSN#1: Chapter 3 Case Study (JWD Consulting). Exercise 4, page 147
3	Integration	<ul style="list-style-type: none"> • 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, page 195
4	Scope	<ul style="list-style-type: none"> • Requirements Collection • Scope Management • Development Approach Considerations 	EX: Work Breakdown Structure	Read Chapter 6 ASSN#3: Chapter 5, Exercise 1, Page 236
5	Schedule	<ul style="list-style-type: none"> • Schedule Management • Gantt Charts • Critical Path • Agile Schedule Management 	EX: Gantt Chart	Read Chapter 7 ASSN#4: Chapter 6, Exercise 11, Page 282
6	Cost	<ul style="list-style-type: none"> • 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	Quality	<ul style="list-style-type: none"> • 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
8	Resources	<ul style="list-style-type: none"> • 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	Communications	<ul style="list-style-type: none"> • 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	Risk	<ul style="list-style-type: none"> • Risk Management Plan • Identifying Risks • Risk Analysis • Risk Responses 	EX: SWOT Analysis	Read Chapter 12 ASSN#9: Chapter 11, Exercise 4, Page 500
11	Procurement	<ul style="list-style-type: none"> • Planning Procurement Management • Conducting Procurements • Controlling Procurements 	EX: Make-Buy Analysis	Read Chapter 13 ASSN#10: Chapter 12, Exercise 6, Page 536
12	Stakeholders	<ul style="list-style-type: none"> • Recognizing Project Stakeholders • Stakeholder Engagement • Managing Stakeholders • Monitoring Stakeholders 	EX: Present overall learnings from the class.	Review PMBOK 7 th Edition ASSN#11: Chapter 13, Exercise 3, Page 559
	Enterprise Architecture	<ul style="list-style-type: none"> • Fundamentals of EA • EA Frameworks and Methodologies • Alignment to strategy • Components and Artifacts • Architecture Development Method (ADM) • EA governance 		
13	PMBOK 7 th Edition	<ul style="list-style-type: none"> • Project Management Principles • Project Performance Domains • Tailoring 	Review for Exam Prep	Review for Exam Prep

		<ul style="list-style-type: none"> Models, Methods, Artifacts 		
14	Final Exam	<ul style="list-style-type: none"> Full Syllabus 	Exam will be virtual, 2 hours long, and available for 4 days	

Assignment Grading

Class Participation:	14%	(14 classes, 1% each)
Homework Assignments:	50%	(10 Assignments, 5% each)
Class Presentation:	10%	(Students will present their class project as part of their team)
Peer Review:	5%	(Based on teammates' evaluation of contribution in class project)
Class Evaluation:	1%	(Submit a review for the class, professor, syllabus, course content, etc.)
Final Exam:	20%	(Multiple Choice; Quantitatively Graded)

Grading Scale

A	95 – 100%	B	84 – 86.9%	C	74 – 76.9%
A-	90 – 94.9%	B-	80 – 83.9%	C-	70 – 73.9%
B+	87 – 89.9%	C+	77 – 79.9%	F	69.9% & below

Final Percentage will be rounded. For e.g., 83.96% will be considered as 84% and get a B grade, or 89.92% will be considered as 89.9% and get a B+ grade.

Attendance/Late Work Policy

Attendance Policy

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. Note: The dynamics of class discussions create significant value for the course, and it is essential for all students to actively participate in these discussions. This will be positively noted by the professor and will be considered as “extra credit” that could influence your final grade positively.

Late Work Policy

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.

End-of-Course Evaluation Surveys

Your feedback regarding your educational experience in this class is particularly important to the College of Engineering. Your comments will make a difference in the future planning and presentation of our curriculum.

At the end of this course, please take the time to complete the evaluation survey at <https://neu.evaluationkit.com>. Your survey responses are **completely anonymous and confidential**. For courses 6 weeks in length or shorter, surveys will be open one week prior to the end of the courses; for courses greater than 6 weeks in length, surveys will be open for two weeks. An email will be sent to your Northeastern University Mail account notifying you when surveys are available.

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.

As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, examinations of whatever kind, collaborative work, the use of study aids,

the appropriateness of assistance, and other issues. Students are responsible for learning the conventions of documentation and acknowledgment of sources in their fields. Northeastern University expects students to complete all examinations, tests, papers, creative projects, and assignments of any kind according to the highest ethical standards, as set forth either explicitly or implicitly in this Code or by the direction of instructors.

Go to <http://www.northeastern.edu/osccr/academic-integrity-policy/> to access the full academic integrity policy.

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.

MGEN Student Feedback

Students who would like to provide the MGEN unit with anonymous feedback on this particular course, Teaching Assistants, Instructional Assistants, professors, or to provide general feedback regarding their program, may do so using this survey: https://neu.co1.qualtrics.com/jfe/form/SV_cTIAbH7ZRaaW0Ki

University Health and Counseling Services

As a student enrolled in this course, you are fully responsible for assignments, work, and course materials as outlined in this syllabus and in the classroom. Over the course of the semester if you experience any health issues, please contact UHCS.

For more information, visit <https://www.northeastern.edu/uhrs>.

Student Accommodations

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability.

For more information, visit <https://drc.sites.northeastern.edu>.

Library Services

The Northeastern University Library is at the hub of campus intellectual life. Resources include over 900,000 print volumes, 206,500 e-books, and 70,225 electronic journals.

For more information and for education specific resources, visit <https://library.northeastern.edu>
Network Campus Library Services: [Northeastern University Library Global Campus Portals](#)

24/7 Canvas Technical Help

For immediate technical support for Canvas, call 617-373-4357 or email help@northeastern.edu

Canvas Student Resources: <https://canvas.northeastern.edu/student-resources/>

For assistance with my Northeastern e-mail, and basic technical support:

Visit ITS at <https://its.northeastern.edu>

Email: help@northeastern.edu

ITS Customer Service Desk: 617-373-4357

Diversity and Inclusion

Northeastern University is committed to equal opportunity, affirmative action, diversity, and social justice while building a climate of inclusion on and beyond campus. In the classroom, members of the University community work to cultivate an inclusive environment that denounces discrimination through innovation, collaboration, and an awareness of global perspectives on social justice.

Please visit <http://www.northeastern.edu/oidi/> for complete information on Diversity and Inclusion

Title IX

Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal financial assistance.

Northeastern's Title IX Policy prohibits Prohibited Offenses, which are defined as sexual harassment, sexual assault, relationship or domestic violence, and stalking. The Title IX Policy applies to the entire community, including male, female, transgender students, faculty, and staff.

In case of an emergency, please call 911.

Please visit <https://www.northeastern.edu/ouec> for a complete list of reporting options and resources both on- and off-campus.