



Northeastern University

College of Engineering

Multidisciplinary Graduate Engineering Course Syllabus

Course Information

Planning & Managing Information Systems Development
INFO6245 - 03
Spring 2024
4 Credit Hour

Location

TBD

Instructor Information

Kam Heydari
k.heydari@northeastern.edu

Technical/Course Materials Requirements (if applicable)

BOOK

A Guide to the Project Management Body of Knowledge (PMBOK® Guide)—Sixth Edition (ENGLISH)

<https://learning.oreilly.com/library/view/a-guide-to/9781628253900/>

Course Description/Prerequisite

Provides an overview of the most popular information systems needs' assessment methodologies including portfolio analysis, stage assessment, business systems planning. Topics include utilities Information Technology 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 Technology 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. Velero Technology ETP tools will be used for project management practices.

Student Learning/Course Outcomes (SLOs)

Upon satisfactory completion of this course, a student should be able to:

- Students will be able to describe what is the organizational strategy and traditional project life cycle and map each stage in the cycle as well as a basic understanding of the Kanban agile methodology.
- Students will identify the required resources for each stage in the project life cycle, including stakeholders, and tools.
- Students will be able to estimate the time needed to complete a project, considering factors such as task dependencies and task lengths. Identify project goals, constraints, deliverables, performance criteria, control needs, and resource requirements in consultation with stakeholders.
- Students will be able to develop a project scope document considering customer requirements and project internal/external goals and objectives.
- The student will be able to estimate project cost and required budget and define the timeline project status.
- Students will be able to align the project to the organization's strategic plans and business justification throughout its lifecycle.
- Students will learn how to communicate effectively and utilize technology tools for communication, collaboration, information management, and decision support.
- Students will be able to apply project management practices to identify and launch new programs, initiatives, products, services, and events relative to the needs of stakeholders.

Attendance Policy

During each unit, students are required to complete assigned readings, engage in class discussions or other learning activities, and submit written assignments. It is important to note that there may be a one-week grace period for active participation in ongoing class conversations and learning activities.

However, if a student's participation is delayed beyond one week, they must notify the faculty in advance, and their grades will be adjusted accordingly.

Participation in class discussions is highly valued and will contribute to 10% of the total grade.

Students who miss two or more classes will not receive any points toward their grades. The dynamic of class discussion creates significant value for the course, and it is essential for all students to actively participate in these discussions.

Late Work Policy

Students must submit assignments by the deadline in the time zone noted in the syllabus.

Students must communicate with the faculty before the deadline if they anticipate work will be submitted late. Late submission (<3 hours) will result in a 10% reduction in the grade. Work submitted later than 3 hours will not be graded.

Work submitted late without prior communication and authorization from faculty will not be graded.

Grading/Evaluation Standards Grade Scale

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

Grade Breakdown:

Category # 1 – Individual Grade 35%

Category # 3 – Test/Quiz 20%

Category # 2 – Group Project 35%

Category #4 – Attendance & Participation 10%

Course Schedule

Please note that the syllabus and quiz timeframe are subject to adjustment based on the new material, class size, and pace of the class.

Week	Topic	Reading
1	Introduction – Student Profile	
2	Project Management Overview Individual project assignment	PIMBook - Project Management Framework
3	Project Strategic Planning Student Assignment Presentation	
4	Project Initiation	4.1. Develop Project Charter 13.1. Identify Stakeholder
5	Student Project Work	4.2. Develop Project Management Plan 5.1. Plan Scope Management 5.2. Collect Requirements 5.3. Define Scope 5.4. Create WBS
6	Project Planning Part I	Lecture
7	Student presentation + Quiz	6.1. Plan Schedule Management 6.2. Define Activities 6.3. Sequence Activities

Week	Topic	Reading
		6.4. Estimate Activity Durations
8	Project Planning Part II	Lecture
9	Student presentation	7.1. Plan Cost Management 7.2. Estimate Costs 7.3. Determine Budget 8.1. Plan Quality Management
10	Project Planning Part III	Lecture 9.1. Plan Resource Management 9.2. Estimate Activity Resources
11	Student presentation - Quiz	10.1. Plan Communications Management 11.1. Plan Risk Management 11.2. Identify Risks 11.3. Perform Qualitative Risk Analysis 11.4. Perform Quantitative Risk Analysis 11.5. Plan Risk Responses
12	Project Planning Execution	4.3. Direct and Manage Project Work 4.4. Manage Project Knowledge 8.2. Manage Quality 9.3. Acquire Resources 9.4. Develop Team 9.5. Manage Team 10.2. Manage Communications 11.6. Implement Risk Responses 12.2. Conduct Procurements 13.3. Manage Stakeholder Engagement
13	Project Control & Monitoring Student Project Work - Quiz	4.5. Monitor and Control Project Work 5.5. Validate Scope 5.6. Control Scope 6.6. Control Schedule 7.4. Control Costs 10.3. Monitor Communications 11.7. Monitor Risks 12.3. Control Procurements 13.4. Monitor Stakeholder Engagement

Week	Topic	Reading
14	Project Closing	4.7 Close Project or Phase
15	Final	

Academic Integrity

A commitment to the principles of academic integrity is essential to the mission of Northeastern University. The promotion of independent and original scholarship ensures that students derive the most from their educational experience and their pursuit of knowledge. Academic dishonesty violates the most fundamental values of an intellectual community and undermines the achievements of the entire University.

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.

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 <http://www.northeastern.edu/drc/getting-started-with-the-drc/>.

Library Services

The Northeastern University Library is 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 <http://subjectguides.lib.neu.edu/edresearch>.

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, member 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 www.northeastern.edu/titleix for a complete list of reporting options and resources both on- and off-campus.