

INFO 6245 Planning & Managing Information Systems Development

Course Information

Course Title: Planning & Managing Information Systems Development

Course Number: INFO 6245-03

Term and Year: Fall 2024

Credit Hour: 4 CRN: 16599

Course Format: Traditional, On-Ground

Class Date and Time: Tuesdays, 3-6 PM PST.

Location: Seattle

Instructor Information

Full Name: David Fannin

Email Address: d.fannin@northeastern.edu

Office Hours: Tuesday 1 PM PST (see Canvas for the MS Teams Link)

Instructor Biography

David is a senior software engineering executive from the Cloud, Infrastructure and Big Data domains, with extensive experience in creating, building and managing software development teams, and leading product development efforts. He has held key engineering roles in Silicon Valley companies such as Amazon Web Services, Yahoo, Cisco, Juniper Networks and several startups that you've never heard of. David started his career as a Member of Technical Staff at AT&T Bell Laboratories in New Jersey. In these roles, he has spearheaded major software engineering initiatives, optimized software delivery processes, and transformed teams by driving revitalized software release processes, improving software quality and introducing innovative new integration and deployment processes, including Agile Software Development. David holds a Master's degree in Computer Science and a Bachelor's degree in Engineering, both from California Polytechnic State University, San Luis Obispo.

Teaching Assistant Information

Full Name: Yingtong Xu

Email Address: xu.yingt@northeastern.edu.

Office Hours: TBD

Course Prerequisites

None

Course Description

Provides an overview of the most popular information systems needs' assessment methodologies including portfolio analysis, stage assessment, business systems planning, and the Alloway survey technique. Topics include utilities IS 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 IS 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 case studies extensively.

Course Learning Outcomes

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 Agile methodologies (Scrum and Kanban).
- 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.

Required Tools and Course Textbooks.

Textbook: A Guide to the Project Management Body of Knowledge (PMBOK® Guide)—Seventh Edition ISBN: 9781628256642
Available from Amazon

Course Schedule/Topics Covered.

Week	Date	In Class Topic	Туре
1	9/03	No Class	
2	9/10	Introductions	Lecture
		Course and Syllabus Overview	

		Module 1: Intro to Project Mngt and Fundamentals	
3	9/17	Module 2: Project Integration and Scope In-class Discussion: Project Charters	Lecture + Discussion
4	9/24	Module 3: Project Schedule and Cost Estimation In-class Discussion: Project Estimation	Lecture + Discussion
5	10/1	Module 4: Project Quality and Resource Mngt Project Team Introduction	Lecture + Team Intro
6	10/8	Module 5: Stakeholder Mngt Project Team Exercise	Lecture + Team
7	10/15	Module 6: Risk Management Project Team Exercise	Lecture + Team
8	10/22	Module 7: Procurement Project Team Exercise Mid Term Exam	Lecture + Team + Exam
9	10/29	Module 8: Project Communications and Ethics Project Team Exercise	Lecture + Team
10	11/5	Module 9: Agile Project Mngt Project Team Exercise	Lecture + Team
11	11/12	Project Team Presentations	Presentations
12	11/19	Module 10: Managing Release and Software Tools In-class Discussion	Lecture + Discussion
13	11/26	Module 11: Frameworks for Scaling PM In-class Discussion	Lecture + Discussion
14	12/3	Module 12: Advanced Topics in PM Review	Lecture + Review
15	12/10	Final Exam	Exam

Assignment Grading

Activities

- Attendance and Participation: Attendance and Participation are integral components of your grade. Active participation is expected and will be assessed based on your engagement in class and team activities.
- 2. Weekly Assignments: Each week, assignments will be provided to the class for the following week, usually reading assignments from the textbook or other sources. Additionally, a topic will be assigned each week to assigned teams to discuss and answer specific questions based on each weeks' lecture topic, which will be submitted and graded as a team assignment.
- 3. Team Project: The class will be divided into randomly assigned teams of 4-5 people and will be asked to work on a comprehensive management plan for a real-world scenario, applying the knowledge and techniques learned in this class. Class time will be allotted in 5 class sessions for the team to meet and work on this project. The team will present their findings in a 15 minute presentation to the class and instructor.

4. Midterm and Final Exams: Midterm and Final exams will be held at the midpoint and end of the class, respectively. These exams will be a combination of multiple choice, short answer and case study questions, and will cover the previous course material, including assigned readings.

Grading will be done using the following grade weighting:

Category	Component	Percent of Grade	
1	Attendance and Participation	10%	
2	Weekly Assignments	20%	
2	Team Project	25%	
3	Mid-term Exam	20%	
4	Final Exam	25%	
Total		100%	

Grading Scale

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

Attendance/Late Work Policy

Attendance Policy

Students registered in MGEN courses (INFO, CSYE, and DAMG) are allowed a maximum of 2 absences per course, with 3 or more absences resulting in an automatic 'F' for that course. Students are expected to inform their instructors of any absences in advance of the class; if a student is sick long-term or experiences a medical issue that prevents class attendance, it is strongly encouraged that they speak with their Academic Advisor (coe-mgen-gradadvising@northeastern.edu) to learn more about the Medical Leave of Absence. Should a student anticipate being unable to attend 3 or more classes, they should discuss their situation with their Academic Advisor to explore other types of leave in accordance with the University's academic and global entry expectations. International students should review the Office of Global Services webpage to understand their visa compliance requirements.

Teaching Assistants (TAs) or Instructional Assistants (IAs) will be present at each class to collect student attendance.

Late Work Policy

Students must submit assignments by the deadline in the time zone noted in the syllabus. Students must communicate with the faculty prior to the deadline if they anticipate work will be submitted late. Work submitted late without prior communication with faculty will not be graded.

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

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.

MGEN Student Feedback

Students who would like to provide the MGEN unit with <u>anonymous</u> 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/uhcs.

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.edu 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.