Project Management in the Information Age
MASY1-GC 1250 | 102 | Spring 2024 | 1/25/2024 - 5/2/2024 | 3 Credit
Modality: In-person
Course Site URL: https://brightspace.nyu.edu/

General Course Information
Name/Title: Raj Iyer, Adjunct Instructor
NYU Email: rsi2729@nyu.edu
Class Meeting Schedule: 01/25/2024 – 05/02/2024 | Thursdays | 06:20pm - 08:55pm
Class Location: Midtown Center, Bldg: MIDC Room 421
Office Hours: 9:00pm – 10:00 pm Thursdays or as arranged

Description
This course explores the methodologies, technologies, and techniques for managing projects in an information technology environment. Throughout this course, students learn to define a business problem, plan the delivery of a solution for that problem, and manage the quality completion of those deliverables. The course equips students with various project management techniques to effectively plan and manage organizational projects.

Prerequisites
MASY1 – GC 1240

Learning Outcomes
At the conclusion of this course, students will be able to:
- Understand the role of a project manager or scrum master and the organization of project teams in real world business and technology initiatives
- Develop a basis for evaluating the effectiveness of different project management techniques throughout the project lifecycle
- Determine the business need for a proposed technology project and its alignment to the business outcomes using various analytic tools
- Product business requirements to represent features and functions of a systems deliverable, including acceptance criteria
- Understand and apply the Systems Development Lifecycle Model (SDLC) and Agile/Scrum methodologies to projects during various phases of a project
- Develop a project proposal, including a recommendation for a systems solution and the project framework for planning and execution of the project

Communication Methods
Be sure to turn on your NYU Brightspace notifications and frequently check the "Announcements" section of the course site. This will be the primary method I use to communicate information critical to your success in the course. To contact me, send me an email. I will respond within 24 hours.

Structure | Method | Modality

There are 14 session topics in this course. The sessions are organized into sprints, to allow understanding the material with hands on experience on the topics. The first class will be used to organize teams and cover deliverables until the midterm. This part of the course will cover background on the field of project management and use sample projects to dive deeper into each area covered. The second part of the course will focus on creating a proposal for a larger project.

Class Exercises
Many of the class sessions include team and individual exercises. Team exercises will allow students to learn each session's material through hands on exercises. Team exercises will use Agile or Scrum methodologies to introduce these in a hands-on manner. Expectations for each team exercise is that students will:
- Participate in teams and understand roles in the team
- Actively work with team for the exercise(s) and produce deliverables
- Share with class
- Ask questions and note learnings

Expectations

Learning Environment
You play an important role in creating and sustaining an intellectually rigorous and inclusive classroom culture. Respectful engagement, diverse thinking, and our lived experiences are central to this course, and enrich our learning community.

Participation
You are integral to the learning experience in this class. Be prepared to actively contribute to class activities, group discussions, and work outside of class.

Assignments and Deadlines
Please submit all assignments to the appropriate section of the course site in NYU Brightspace. If you require assistance, please contact me BEFORE the due date.

Course Technology Use
We will utilize multiple technologies to achieve the course goals. I expect you to use technology in ways that enhance the learning environment for all students.

Feedback and Viewing Grades
I will provide timely meaningful feedback on all your work via our course site in NYU Brightspace. You can access your grades on the course site Gradebook.

Attendance
I expect you to attend all class sessions. Attendance will be taken into consideration when determining your final grade. Refer to the SPS Policies and Procedures page for additional information about attendance.

Textbooks and Course Materials

Successful Project Management
7th Edition, 2018
Jack Gido, James P. Clements, and Rose Baker Cengage Learning
ISBN-13: 978-1-337-09547-1

A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition
7th Edition, 2021
Project Management Institute
ISBN 13: 978-1628256642

Required Reading:
(Available online via Bobst library)
> **Title** Scaling Scrum Across Modern Enterprises
> **Author/Creator** Cecil. Rupp

Supporting Materials
1. Access to the online homepage (course) resources in Brightspace
2. The Class Forum
3. The NYU Wiki
4. Selected links to online sites, including YouTube videos as appropriate
5. Microsoft Project 2016 (for a Windows Operating System only or the NYU Virtual Software Library)

Grading | Assessment
Your grade in this course is based on your performance on multiple activities and assignments. Since all graded assignments are related directly to course objectives and learning outcomes, failure to complete any assignment will result in an unsatisfactory course grade. All written assignments are to be completed using APA format and must be typed and double-spaced. Grammar, punctuation, and spelling will be considered in grading. Please carefully proof-read your written assignments before submitting them for a grade. I will update the grades on the course site each time a grading session has been completed.

DESCRIPTION	PERCENTAGE
Class Participation (including quizzes)	20%
Discussion Board Activities	5%
Written reports (2) based on in-class exercise	10%
Mid-Term Exam	15%
Final Exam	15%
Team Project (over semester)	35%
_____	_____
TOTAL POSSIBLE	100%

See the [“Grades” section of Academic Policies](link) for the complete grading policy, including the letter grade conversion, and the criteria for a grade of incomplete, taking a course on a pass/fail basis, and withdrawing from a course.

Course Outline

Start/End Dates: 01/25/2024 - 05/02/2024 / Thursdays
Time: 06:20pm - 08:55pm
No Class Date(s): Thursday - 3/21/2024
Special Notes: Spring Break 03/18/24 - 03/24/24

Session 1, 01/25/24
Introduction and Overview
The session 1 discussion will focus on introductions and the project framework
Theme: The role of a project manager. The Project Life Cycle, Knowledge Domains, and Constraints

Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 1

Learning Objectives:
- Explain what a 'project' is
- The role of a project manager/scrum master
- Overview of methodologies
- Outline the essential components of the project management framework
- Examine the 'Project Life Cycle'
- Discuss the significance of the key knowledge (practice) domains (ten in total) associated with the structured project management approach
- Define Definition of Ready

Exercises:
- Introductions
- Organize into scrum teams
- Sample project exercise and roles

Session 2, 02/01/24
Project Scope and the Business Case
The session 2 discussion will focus on the business need and who will be impacted
The theme: Initiation, Goals, and Objectives

Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 3

Learning Objectives:
- Define the meaning of Project Scope and Scope Management

- Identify the five Project Components that define Scope: A Statement of Purpose, Requirements, Specifications, Deliverables, and Measurable Objectives
- Discuss the characteristics of the four Factors of Scope: In Scope, Out of Scope, Scope Creep, And Integrated Change Management
- Compare requirements information gathering techniques
- Characterize the differences between requirements and specifications
- Summarize the concept of Requirements Traceability

Exercises:

Sprint 0
- Sprint 0 activities as needed, definition of ready
- Create project proposal – what are you going to build
- Create requirements backlog within scrum teams

Session 3, 02/08/24
Project Team Management
The session 3 discussion will focus on the formation of the project team
The theme: The Stages of Team Development

Assignments:
Reading: Gido/Clements Text: Chapter 11

Learning Objectives:
- Characterize the project team as a 'Unit'
- Compare the difference between a workgroup and team
- Describe the stages of team development
- Demonstrate the use of a 'RACI' matrix
- Discuss and explain the different methodologies for decision-making, including the decision- making factors

Exercises:
Sprint 1
- Create epics and user stories
- Create communications plan
- Run standups

Session 4, 02/15/24
Project Stakeholder Management
The session 4 discussion will focus on individuals and entities who have a 'stake' in the project
The theme: Priorities

Assignments:
Reading: Articles, Library texts as posted

Learning Objectives
- Explain the project stakeholder management process
- Define the project stakeholder categories
- Identify and describe the four project stakeholder types
- Demonstrate the balance across the project stakeholder behavioral types

Exercises:
Sprint 1
- Create RACI and review typical corporate organizational structure
- Run standup with awareness of stakeholders and overall project status
- Sprint 1 "demo"

Session 5, 02/22/24
Scheduling Methodologies: The Workplan
The session 5 discussion will focus on the Work Breakdown Structure (WBS) and the workplan
The theme: Scheduling Tools and Methodologies

Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 5

Learning Objectives:
- Discuss the 'decomposition' process associated with breaking-down the scope of a projected into its component work-packages and their associated activities
- Introduce GANTT charts, PERT charts, Scrum and Kanban boards (Jira) and other collaboration software
- Prepare a work breakdown structure for an assigned case study
- Describe the attributes of tasks (activities) in a workplan

Exercises:
Sprint 2
- Create project artifacts
- PERT/Critical Path analysis
- WBS, scrum and Kanban boards

Session 6, 02/29/24
The Financial Plan
The session 6 discussion will focus on the value proposition and alignment
The theme: Budget Preparation and Variance Tracking

Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 7
Exercises:

Learning Objectives:
- Discuss the process associated with determining the anticipated expenses for project

- Describe the methodology for developing a preliminary project budget
- Describe the methodology for developing a detailed project budget
- Explain a project budgets cost and data-flow process
- Illustrate the project cost management matrix

Exercises:
Sprint 2
- Create project budget and sample spend
- Resource planning and capital planning
- Sprint 2 "demo"

Session 7, 03/07/24
The session 7 discussion will focus on reviewing and going in more depth on select topics based on progress to date as well as administering the Mid-Term
The theme: Review
Assignments
Mid-term Exam (Modules 1-6)

No class, 03/14/24
NO CLASS Scheduled MARCH 14, 2024. Spring Break

Session 8, 03/21/24
Project Risk Management
The session 8 discussion will focus on risks that become issues.
The theme: Risk Mitigation and Agreements
Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 8

Learning Objectives
- Discuss the importance of risk management to project management
- Describe the risk management processes
- Distinguish the difference between positive risk and negative risk
- Demonstrate the use of the risk probability and impact matrix

Exercises:
Sprint 3
- Create Risk artifacts for project

Individual Projects
- Begin individual projects - creating proposals (1-3) for individual projects

Session 9, 03/28/24
Project Procurement Management
The session 9 discussion will focus on vendor and supplier relationships.

The theme: Partnership Agreements

Assignments:
Reading:

Learning Objectives
- Define project procurement management
- Develop a 'Statement-of-Work'
- Summarize the tools and techniques for project contract administration
- Illustrate the procurement management process

Exercises:
Sprint 3
- Sample procurement exercise
- Sprint 3 "demo"

Individual Projects
- Individual projects - creating requirements for individual projects

Session 10, 04/04/24
Project Quality Management and Introduction to Design Thinking
The session 10 discussion will focus on the quality planning process and user expectations.
The theme: Requirements Traceability

Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 4
        Design Thinking articles (TBD)

Learning Objectives:
- Define the meaning of project quality management and discuss what is essential to a successful project
- Describe the quality management process, including: Quality Planning (QP,) Quality Assurance (QA,) and Quality Control (QC.)
- Summarize the quality process improvement initiative
- Explain the Baldrige criteria for excellence and other methodologies
- Introduction to Design Thinking

Exercises:
Scrum Team
- Create a Client journey map

Session 11, 04/11/24
Project Communications Management and continuation of Design Thinking
The theme: A Communications Model

Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 12

Articles as assigned

Learning Objectives
- Describe the importance of the project communication management knowledge domain
- Demonstrate the flow of the communications model
- Prepare the communications plan grid
- Illustrate communication methods
- Running and planning a workshop

Exercises:
Scrum Team
- Plan and run a workshop

Session 12, 04/18/24
Project Integration Management
The session 12 discussion will focus on the alignment of the project framework components.
The theme: Integrated Change Management

Assignments:
Reading:

Learning Objectives
- Identify and define the seven elements of project integration management
- Develop a 'Project Charter'
- Discuss the importance of change management and integrated change control
- Characterize the 'paradoxes' of project management

Exercises:
Scrum Team
- Create and present business case

Individual Projects
- Individual projects - creating project plans and expected outcomes

Session 13, 04/25/23
Project Closure and Outcome Assessment
The session 13 discussion will focus on metrics, measurement, and outcome assessment.
The theme: Lessons Learned

Assignments:
Reading: Gido, Clements, and Baker Text: Chapter 9

Learning Objectives
- Define the project 'Closure' process group (phase) of the project life cycle
- Discuss the project dimensions: people, processes, technology, and solution
- Illustrate project management best practices

- Explain the meaning of 'Lessons Learned'

Exercises:
Scrum Teams
- Sprint retrospective

Individual projects
- Present proposals and project plans

Session 14, 05/02/23
Final Exam (Modules 7-13)

NOTES:

The syllabus may be modified to better meet the needs of students and to achieve the learning outcomes.

The School of Professional Studies (SPS) and its faculty celebrate and are committed to inclusion, diversity, belonging, equity, and accessibility (IDBEA), and seek to embody the IDBEA values. The School of Professional Studies (SPS), its faculty, staff, and students are committed to creating a mutually respectful and safe environment (*from the SPS IDBEA Committee*).

New York University School of Professional Studies Policies

1. <u>Policies</u> - You are responsible for reading, understanding, and complying with University Policies and Guidelines, NYU SPS Policies and Procedures, and Student Affairs and Reporting.

2. <u>Learning/Academic Accommodations</u> - New York University is committed to providing equal educational opportunity and participation for students who disclose their dis/ability to the Moses Center for Student Accessibility. If you are interested in applying for academic accommodations, contact the Moses Center as early as possible in the semester. If you already receive accommodations through the Moses Center, request your accommodation letters through the Moses Center Portal as soon as possible (mosescsa@nyu.edu | 212-998-4980).

3. <u>Health and Wellness</u> - To access the University's extensive health and mental health resources, contact the NYU Wellness Exchange. You can call its private hotline (212-443-9999), available 24 hours a day, seven days a week, to reach out to a professional who can help to address day-to-day challenges as well as other health-related concerns.

4. <u>Student Support Resources</u> - There are a range of resources at SPS and NYU to support your learning and professional growth. For a complete list of resources and services available to SPS students, visit the NYU SPS Office of Student Affairs site.

5. <u>Religious Observance</u> - As a nonsectarian, inclusive institution, NYU policy permits members of any religious group to absent themselves from classes without penalty when required for compliance with their religious obligations. Refer to the University Calendar Policy on Religious Holidays for the complete policy.

6. <u>Academic Integrity and Plagiarism</u> - You are expected to be honest and ethical in all academic work. Moreover, you are expected to demonstrate how what you have learned incorporates an understanding of the research and expertise of scholars and other appropriate experts; and thus recognizing others' published work or teachings—whether that of authors, lecturers, or one's peers—is a required practice in all academic projects.

Plagiarism involves borrowing or using information from other sources without proper and full credit. You are subject to disciplinary actions for the following offenses which include but are not limited to cheating, plagiarism, forgery or unauthorized use of documents, and false form of identification

Turnitin, an originality detection service in NYU Brightspace, may be used in this course to check your work for plagiarism.

Read more about academic integrity policies at the NYU School of Professional Studies on the Academic Policies for NYU SPS Students page.

7. <u>Use of Third-Party Tools</u> - During this class, you may be required to use non-NYU apps/platforms/software as a part of course studies, and thus, will be required to agree to the "Terms of Use" (TOU) associated with such apps/platforms/software.

These services may require you to create an account but you can use a pseudonym (which may not identify you to the public community, but which may still identify you by IP address to the company and companies with whom it shares data).

You should carefully read those terms of use regarding the impact on your privacy rights and intellectual property rights. If you have any questions regarding those terms of use or the impact on the class, you are encouraged to ask the instructor prior to the add/drop deadline.