

# Project Management in the Information Age MASY1-GC 1250 | 101 | Spring 2024 | 1/23/2024 - 4/30/2024 | 3 Credit

Modality: In-person

Course Site URL: <a href="https://brightspace.nyu.edu">https://brightspace.nyu.edu</a>

#### **General Course Information**

Name/Title: Michael Shum, PMP, Adjunct Assistant Professor

NYU Email: ms10820@nyu.edu

Class Meeting Schedule: 1/23/2024 - 4/30/2024 | Tuesdays | 06:20pm -- 08:55pm

Class Location: Bldg: MIDC, Room 507

**Office Hours:** Appointments may be made by students to speak with the instructor in person

(where feasible) or by phone.

# 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:

- Evaluate the impact of current and emerging technologies on their alignment with individual, organizational, and societal needs
- Evaluate the IT project plans to align with data management principles
- Determine the business need for a proposed IT project and its alignment to the organization's mission and or business model using various analytic tools
- Develop an IT project proposal, including a recommendation for a systems solution and the framework methodology for the planning and execution of a project plan
- Create a Scope Management Plan for an IT/IS project including reference to the product/service deliverables and the project plan artifacts
- Produce a functional specification to represent the features and functions of a project deliverable for alignment to a technical design specification
- Apply the Systems Development Lifecycle Model (SDLC) to IT/IS projects across the lifecycle phases including planning, analysis, design, implementation, and operations
- Prepare a test plan, using a comprehensive test design template, to validate and verify the usability of the planned systems solution.

# **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.

The instructor will not maintain regular office hours. Instead, appointments may be made by students to speak with the instructor in person (where feasible) or by phone. The instructor will make every effort to be available for consultation as needed throughout the course. Students are encouraged to reach out if they have any concerns and are required to contact the instructor in advance of any absences, lateness, or difficulties in completing assignments on a timely basis.

# Structure | Method | Modality

There are 14 session topics in this course. The session topics are organized into three (3) areas of study: 1) History, 2) Learning Principles, and 3) Instructional Design in Practice.

Active learning experiences and small group projects are key components of the course. Assignments, papers, and exams will be based on course materials (e.g., readings, videos), lectures, and class discussions. Course sessions will be conducted synchronously on NYU Zoom, which you can access from the course site in NYU Brightspace.

#### Course Structure/Method

This course is In-person and will meet once a week on Tuesday. Brightspace is the learning management system we will use. We will utilize Brightspace for assignments, announcements and emails. Each class meeting will focus on a discussion topic related to a knowledge domain associated with structured project management. These discussions will be a combination of didactic as well as practical application, using a facilitated teaching and learning approach. This will be done within the context of 'real-world' project initiatives. In addition, in-class exercises will be used to apply the tools, techniques, models, templates, and related practices.

Students are expected to attend each class session and participate in the discussions. Students will be randomly assigned to an in-class group(s) during alternating class meetings to work on a group exercise related to the respective discussion topic. Time will be set aside, inclass, for the groups to meet. The in- class exercise(s) will relate to a problem or opportunity associated with a project that a member of the group team has worked on, or on a project initiative within the context of the tool or knowledge domain that is being studied. Each group will do a read-out of the results of their efforts at the end of the exercise. This will be followed by a facilitated discussion on the problem/issue which the group(s) faced.

In addition to the in-class exercises, students will also participate in the 'PPM Team Project' which will run concurrently throughout the course. Project teams of between three to five (3-5) members in size, will be established through a random selection process, to work together on a project initiative, focused on the 'Initiation' process of the project life cycle. This project initiative (topic) must be presented as a proposal and will require approval. The topic of the project must represent a problem or opportunity scenario, agreed to by the team.



Each team will be responsible for developing a project 'proposal,' a 'requirements document,' and a 'business case,' as deliverables for the assignment. In addition, each team will develop and deliver a team presentation, regarding the project business case.

This course will immerse the student in unified project management, and provide the knowledge, tools, techniques, and templates required for a successful project initiative. It will introduce the student to the roles, responsibilities, and management methodologies used by a project team and its manager to initiate, plan, execute, manage, and close a project. It is designed for a student to engage with other students to develop a foundational working understanding of the fundamental components of structured project management.

# **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. Missed assignments will lower the student's grade based on the percentage of the grade allocated to it. Late assignments are permitted only with advance notice to, and permission from, the instructor. Late submission will be deducted 10 points per day, before the review of the assignment.

# 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

7<sup>th</sup> Edition (February 8, 2017)



Jack Gido, James P. Clements, and Rose Baker Cengage Learning \$99.99 (used) - \$126.00 (new)

ISBN-13: 978-1-337-09547-1

A Guide to the Project Management Body of Knowledge (PMBOK Guide) Seventh Edition

7<sup>th</sup> Edition (August, 2021) Project Management Institute ISBN 13: 9781628256642

# A Guide to the Project Management Body of Knowledge (PMBOK Guide) Sixth Edition

6<sup>th</sup> Edition (September 22, 2017)

Project Management Institute \$70.00 (used) - \$134.00 (new)

ISBN 13: 9781628251845

# **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—typically three (3) days following the completion of an activity.

- Complete assigned readings prior to each class session
- Actively participate in each in-class discussion
- Actively participate in each in-class group/team exercises
- Complete two (Individual) executive summaries based on the in-class exercises
- Complete a Mid-term exam
- Complete a Final exam (not cumulative)

Ac	tively engage in the 'PPM Team Project'	Due Date
0	Submit a (Team) 'Team Contract'	02/13/24
0	Submit a (Team) 'Project Proposal '	02/13/24
0	Submit a (Team) 'Requirements Document'	03/05/24
0	Submit a (Team) 'Business Case' and 'Written Report	'04/23/24
0	Deliver a (Team) 'Team Presentation'	04/23/24
	0 0 0	Actively engage in the 'PPM Team Project'  Submit a (Team) 'Team Contract'  Submit a (Team) 'Project Proposal '  Submit a (Team) 'Requirements Document'  Submit a (Team) 'Business Case' and 'Written Report Deliver a (Team) 'Team Presentation'

The final grade for the course will be based on in-class participation, individual assignments, in-class exams, and the 'PPM Team Project.' To achieve a letter grade of 'A' you must demonstrate a high level of commitment to the course content as evidenced by in-class participation, scoring very well on the mid- term and the final exams, and completing each assignment (individual and team) on-time and within the rigors of the assignment guidelines (requirements.) Points are earned for all the graded assignments as well as participation. You can aggregate a total of 100 points. These points are distributed across a grading scale to determine your final letter grade. The grading scale is as follows:



Participation	15%	
Written reports based on in-class exercise (2 x 10 points @)		
Mid-Term Exam		
Final Exam		
The PPM Team Project:		
Team Project: Proposal ( <b>Team Assessment</b> )	5%	
Team Project: Requirements Document ( <b>Team Assessment</b> )	5%	
Team Project: Business Case (Individual 5 and Team 5)	10%	
Team Project: Presentation (Individual Contribution)	5%	
tal	100%	

See the <u>"Grades" section of Academic Policies</u> 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:** 01/23/2024 - 04/30/2024 | Tuesdays

Time: 06:20pm -- 08:55pm

No Class Date(s): Tuesday, March 19, 2024 Special Notes: Spring Break 03/18/24 - 03/24/24

Please note: all assignments should be submitted via the Brightspace Assignments platform.

Complete assigned readings prior to each class.

#### Week 1: 01/23/24

Introduction and Overview

The session 1 discussion will focus on introductions and the project framework Theme: The Project Life Cycle, Knowledge Domains, and Constraints Learning Objectives:

- Explain what a 'project' is
- 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
- Explain the meaning of project constraints
- Summarize the three major components of structured project management
- Assignments

Reading: Gido, Clements, and Baker Text: Chapter 1 PMBOK 7: The Standard for Project Management 1, 2

Exercises: Introduction

Week 2: 01/30/24



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 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

**Assignments** 

Reading: Gido, Clements, and Baker Text: Chapter 2

PMBOK 7: The Standard for Project Management 3

Exercises:

Distribute the guidelines for the 'Team Project' Announce the Team(s) for the 'Team Project'

#### Week 3: 02/06/24

**Project Team Management** 

The session 3 discussion will focus on the formation of the project team

The theme: The Stages of Team Development

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

Assignments

Reading: Gido/Clements Text: Chapter 11

PMBOK 7: Chapter 2, 2.2

Exercises:

Develop a 'Team Contract' (Team)

Assign the 'Team Contract' Exercise (Individual)

#### Week 4: 02/13/24

Project Stakeholder Engagement

The session 4 discussion will focus on individuals and entities who have a 'stake' in the project The theme: Priorities

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

**Assignments** 



Reading: PMBOK7: Chapter 2.1

Exercises:

Submit the 'Team Contract' for 'your' Project team

Submit the Team(s) Project Proposal for the Team Project

Stakeholder Engagement Exercise

# Week 5: 02/20/24

Developing the Schedule

The session 5 discussion will focus on the Work Breakdown Structure (WBS) and the workplan The theme: Scheduling Tools and Methodologies

Learning Objectives:

- Discuss the 'decomposition' process associated with breaking-down the scope of a projected into its component work-packages and their associated activities
- Navigate the features and functionality of MS Project 2016
- Prepare a work breakdown structure for an assigned case study
- Demonstrate how MS Project can be used to develop a project schedule
- Describe the attributes of tasks (activities) in a workplan
- Develop a basic project workplan using with task relationships using MS Project 2016
- Assignments

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

PMBOK 6: Chapter 5 (5.4) & Chapter 6

PMBOK 7: Chapter 2, 2.4.2.3

Exercises:

Distribute the guidelines and the 'Requirements Document' template for the 'Team Project' Submit the 'Team Contract' Individual Report

The WBS Exercise

# Week 6: 02/27/24

The Financial Plan

The session 6 discussion will focus on the value proposition and alignment

The theme: Budget Preparation and Variance Tracking

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

Assignments

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

PMBOK 6: Chapter 7

Exercises:

The Preliminary Budget

Week 7: 03/05/24

Project Risk Management

The session 8 discussion will focus on risks that become issues



The theme: Risk Mitigation and Agreements

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

**Assignments** 

Reading: Gido, Clements, and Baker Text: Chapter 8

PMBOK 6: Chapter 11 PMBOK 7: Chapter 2, 2.8.5

Exercises:

Submit the Team(s) Requirements Document for the 'Team Project'

Distribute the guidelines for the 'Business Case' for the 'Team Project' The Risk Management Exercise

Week 8: 03/12/24

Midterm - Exam (Modules 1-7)

Week 9: 03/26/24

**Project Procurement Management** 

The session 9 discussion will focus on vendor and supplier relations

The theme: Partnership agreements

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

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

PMBOK 6: Chapter 12 PMBOK 7: Chapter 2, 2.4.6

Exercises:

A Statement-of-Work' (SOW) Exercise

#### Week 10: 04/02/24

Project Quality Management

The session 10 discussion will focus on the quality planning process and user expectations. The theme: Requirements Traceability

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

Assignments



Reading: Gido, Clements, and Baker Text: Chapter 4

PMBOK 6: Chapter 8

PMBOK 7: Chapter 2, 2.6.3

Exercises:

Submit the 'Communications Plan' Individual Report

Distribute the guidelines for the 'Team Presentation' for the 'Team Project'

# Week 11: 04/09/24

**Project Communications Management** 

The session 11 discussion will focus on the 'strata' of the story

The theme: A Communications Model

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

**Assignments** 

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

PMBOK 6: Chapter 10

PMBOK 7: Chapter 2, 2.5.4, Chapter 4, 4.2.2

Exercises: Distribute the guidelines for The Communications Plan

#### Week 12: 04/16/24

Project Integration Management

The session 12 discussion will focus on the alignment of the project framework components

The theme: Integrated Change Management

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

Assignments Reading: PMBOK: Chapter 4

Exercises:

Deliver the 'Communications Plan'

# Week 13: 04/23/24

**Project Closure and Outcome Assessment** 

The session 13 discussion will focus on metrics, measurement, and outcome assessment

The theme: Lessons Learned

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'

Assignments

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



# Exercises:

Deliver the 'Team Presentation' and submit the 'Business Case Written Report'

Week 14: 04/30/24

Final Exam: (Modules 9-13)

# Topics to Be Covered:

- The core content of the course will include:
- Advanced techniques in project management
- Agility in project management
- · Contracts, procurement and negotiations for project managers
- Critical Path Methodology (CPM)
- Determining what constitutes a 'project'
- How to monitor and control a project
- How to close a project
- How to execute a project
- How to plan a project
- How to scope a project
- Integration management
- Professional and social responsibility
- Project communication management
- Project cost management
- · Project management for information systems
- Quality techniques for projects
- Risk and change management
- Stakeholder analysis
- Statement of Work (SOW)
- Team management in a project environment
- The Project Business Case
- The Project Charter
- The Project Life Cycle (PLC) model
- The project management knowledge (practice) areas
- The project management landscape
- The Systems Development Life Cycle (SDLC) model
- Understanding the project management process group

# **Project Management Practices:**

The course will focus on developing a working understanding of the core processes associated with the project management framework. It will focus on developing a working understanding of the core knowledge competencies within the context of the project management life cycle model:

- The Project Lifecycle
  - o The Phases
- Scope Management



- The Deliverables
- Human Resources
  - Managing the Team
- Time Management
  - The Project Schedule
- Project Cost Management
  - o The Budget
- Stakeholder Management
  - Who Has an Interest
- Communications
  - Speak a Language that is Understood
- Risk Management
  - Probability and Impact
- Quality Management
  - Outcome Assessment
- Procurement Management
  - Vendor Relations
- Project Integration Management
  - Coordination and Unification
- Project Management for Information Systems
  - Advanced Techniques
- Agile Project Management
  - Structure and Speed
- The Project Management Landscape
  - Needs Analysis
- Enterprise Project Management
  - Portfolio Management

#### 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 <u>Moses Center for Student Accessibility</u>. If you are interested in applying for academic accommodations, contact the <u>Moses Center</u> 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 (<u>mosescsa@nyu.edu | 212-998-4980</u>).
- 3. <u>Health and Wellness</u> To access the University's extensive health and mental health resources, contact the <u>NYU Wellness Exchange</u>. 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 <u>University Calendar Policy on Religious Holidays</u> 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.