



Managing Innovation and Technology MGMT480 Syllabus

Spring 2024

Course Modality:

This is an online course that will be conducted fully online, asynchronously, via Canvas. For more information on using Canvas and other supported learning tools, visit the IST Service Desk [Knowledgebase](#).

Instructor Information

Instructor	Email	Office Hours
Michael Okrent, Sc.D., PMP, CQM/OE	mdu8@njit.edu	Online only by appointment <i>Please do not schedule same-day appointments without sending an email.</i>

*I will respond to all emails/Inbox messages within 24 hours. Quizzes, homework, and discussions will be graded weekly.

General Information

Course Description

This course focuses on the strategic management of technology and innovation in firms. It will take the perspectives of various levels of management in studying value creation and value capture through technological innovation, intrapreneurship, and entrepreneurship. Students will examine and analyze how firms effectively manage activities involved in value creation and value capture.

Prerequisites/Co-requisites

Junior standing (57 credits)

Course Learning Outcomes

By the end of the course, students will be able to:

1. Analyze the impact of technological innovation on consumers, producers, and society at large.
2. Demonstrate how organizations use innovation strategy to develop products and enter markets.
3. Justify the differences between disruptive technology and sustaining technology.
4. Use New Product Development Processes to exhibit expertise in commonly utilized methods within this field.
5. Explain how to protect innovation using patents, copyrights, and trademarks.
6. Describe the impact of creativity in New Product Development in an established organization and a startup.

Required Materials

- *Strategic Management of Technological Innovation*, 7th edition, Melissa Schilling, McGraw Hill, 2022. Covering Intrapreneurship and Large company NPD
- [*Lean Startup*](#), Eric Ries (free) Covering Entrepreneurship and small business NPD
- [*Harvard Simulation*](#) (\$16.25 as of 2024)
- You will need to submit certain assignments as videos of yourself, which you can record using either your webcam or your smartphone's camera.

Grading Policy

[NJIT Grading Legend](#)

Final Grade Calculation

Final grades for all assignments will be based on the following percentages:

Quizzes (7)	30%
Discussion Forums (14)	25%
Exercises/ Learning Activities/Reflections	20%
Project/ Simulation	25%

Course Work

Quizzes: (30% of grade) There will be seven multiple-choice quizzes. Each quiz will assess your understanding of the material covered in two modules.

Discussion Forums: (25% of grade) The essence of an asynchronous course is the peer-to-peer interaction in each module. You are expected to participate in each discussion forum in Canvas. When all students participate in a discussion, it creates an active learning environment that will help you better understand the materials and be more successful in the class. You will post your initial response to the prompt by Thursday at 11:59 p.m., and respond to two classmates ending with a

question by Sunday at 11:59 pm in the module they are listed. Credit will not be provided for submissions after Sunday.

Exercises/Learning Activities/Reflections: (20% of grade) Assignments will be given in each module to give you an opportunity to apply course concepts. These activities help you practice and prepare for the projects and simulation.

Project/Simulation: (25% of grade) There will be a project with regular milestones. For the project, you will have opportunities to iterate and revise your work based on peer and instructor feedback. The simulation will act as a capstone which will include a 3-4 page paper. Review the rubric that will be used to evaluate your performance.

Feedback

I will deliver feedback weekly on each assignment using the comments feature in Canvas. Late submissions may take longer to provide feedback.

Letter to Number Grade Conversions

A	90-100
B+	85-89
B	80-84
C+	75-79
C	70-74
D	60-69
F	0-59

Exam Information and Policies:

This course has no exams. Per the NJIT [Online Course Exam Proctoring Policy](#), this course will use authentic assessment. You will be assessed and graded on your ability to deliver real-world outputs, participation, and feedback to other students.

Policy for Late Work

Late work for a discussion will be graded at 50% of an equivalent on-time submission. Assignments, project milestones, and other activities will allow for a maximum of 2 days past the due date. Missed assignments, quizzes, discussions, or other homework will be evaluated based on a physician's diagnosis.

Academic Integrity

“Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree to which you are working. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the [NJIT academic code of integrity policy](#).

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing, or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu”

If you use ChatGPT or any other AI tool, you must provide attribution that you used it. All Reference(s) will be checked.

Netiquette

Throughout this course, you are expected to be courteous and respectful to classmates by being polite and active participants. You should respond to discussion forum assignments in a timely manner so that your classmates have adequate time to respond to your posts. Please respect opinions, even those that differ from yours, and avoid using profanity or offensive language.

Module Expectations

This course is organized by modules. In this accelerated course, you will complete two modules per week. For each module, you will watch lecture videos, complete a reading assignment, listen to a podcast, and participate in a class discussion forum. Modules may contain optional videos or other content for enrichment that will not be assessed.

Course Schedule

Module	Topic	Tasks	Submission Due Dates
1	Introduction	Read: Shilling Chapter 1 (12 pages) Ries Introduction & Chapter 1 Start (23 short pages) New Product Development Project Overview Watch: Meet your instructor Lecture Videos Submit: 1. M1 Discussion: Introduce Yourself 2. M1 Assignment: Create a Canva Account	1. Initial post due Wednesday, Response to two classmates due Friday 2. Sunday

2	Sources of Innovation	Read: Shilling Chapter 2 (28 pp) Ries Chapter 2 Define (10 pp) Watch: Lecture Videos Listen: Podcast How I built this OpenAI Sam Altman Submit: <ol style="list-style-type: none"> 1. M2 Peer Review Discussion: Open AI 2. M2 Assignment: Create a Work of Art 3. M2 Quiz 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Saturday, Part C by Sunday 2. Sunday 3. Sunday
3	Types and patterns of innovation	Read Schilling Chapter 3 (24 pp) Ries Chapter 3 Learn (17 pp) Watch: Lecture Videos Listen: Podcast How I built this Honest Tea Submit: <ol style="list-style-type: none"> 1. M3 Discussion: Honest Tea 2. M3 Milestone 1 Problem Identification 3. M3 Reflection 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Sunday 2. Reflection by Sunday 3. Milestone 1 by Sunday
4	Battle for Standards and Design Performance	Read: Shilling Chapter 4 (22 pp) Ries Chapter 4 Experiment (15 pp) Watch: Lecture Videos YouTube: Battle for Standards and Dominant Design Listen: Podcast How I built this Method Podcast Tesla vs. The Competition (5:30-10:07) Submit: <ol style="list-style-type: none"> 1. M4 Peer Review Discussion: Method 2. M4 Assignment - Dominant Design 3. M4 Quiz 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Saturday, Part C by Sunday 2. Sunday 3. Sunday
5	Timing of Entry	Read: Schilling Chapter 5 (18 pp) Ries Chapter 5 (4 pp) Article: Pivot decisions in startups: a systematic literature review Watch: Lecture Videos Listen: Podcast How I built this Door Dash Submit: <ol style="list-style-type: none"> 1. M5 Discussion: DoorDash 2. M5 Milestone 2 Initial Validation 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Sunday 2. Sunday
6	Defining the Organization's Strategic Direction	Read: Schilling Chapter 6 (20 pp) Ries, Chapter 6 Test (20 pp) Watch: Lecture Videos Listen: Podcast How I build this Captcha/Duolingo Submit <ol style="list-style-type: none"> 1. M6 Peer Review Discussion: Captcha/Duolingo 2. M6 Assignment 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Saturday, Part C by Sunday 2. Sunday 3. Sunday

		3. M6 Quiz	
7	Choosing Innovation Projects	Read: Schilling Chapter 7 (24 pp) Ries, Chapter 7 Measure (32 pp) Watch: Lecture Videos Listen: Podcast: Clif Bar: Gary Erickson Submit: <ol style="list-style-type: none"> 1. M7 Discussion: Clif Bar: Gary Erickson 2. M7 Reflection 3. M7 Milestone 3 Refining the Product 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Sunday 2. Sunday 3. Sunday
8	Collaboration Strategies	Read: Schilling Chapter 8 (30 pp) Ries Chapter 8 Pivot (28 pp) Listen: Podcast: Taylor Ryan Watch: Lecture Videos YouTube: The Skill of Humor Submit: <ol style="list-style-type: none"> 1. M8 Peer Discussion: Taylor Ryan 2. M8 Assignment: Project Humor 3. M8 Quiz 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Saturday, Part C by Sunday 2. Sunday 3. Sunday
9	Protecting Innovation	Read: Schilling Chapter 9 (26 pp) Ries Chapter 9 Batch (20 pp) Watch: Lecture Videos Listen: Podcast S2 Ep7: Protecting Ideas Drives Innovation (Duration: 32 minutes) Submit: <ol style="list-style-type: none"> 1. M9 Discussion: Protecting Innovation 2. M9 Reflection 3. M9 Project Milestone 4 Creating a Pro-Forma Budget 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Sunday 2. Sunday 3. Sunday
10	Organizing for Innovation	Read Schilling Chapter 10 (26 pp) Ries Chapter 10 Grow (17 pp) Watch: Lecture Videos YouTube: Innovation Strategy Listen Podcast Organizational Structure: When Waiting is a Nightmare! (Duration: 53 minutes) Submit <ol style="list-style-type: none"> 1. M10 Peer Review Discussion: Organizational Structure 2. M10 Assignment: 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Saturday, Part C by Sunday 2. Sunday 3. Sunday

		3. M10 Quiz	
11	Managing the New Product Development Process	Read: Schilling Chapter 11 (30 pp) Ries Chapter 11 Adapt (27 pp) Watch: Lecture Videos Listen: Podcast Amazon Submit: <ol style="list-style-type: none"> 1. M11 Discussion 2. M11 Project Milestone 5 Second Validation 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Sunday 2. Sunday 3. Sunday
12	Managing New Product Development Teams	Read: Schilling Chapter 12 (18 pp) Ries Chapter 12 Innovate (18 pp) Watch: Lecture Videos Listen: Podcast Freakonomics Entrepreneurial Government Submit: <ol style="list-style-type: none"> 1. M12 Peer Review Discussion: Entrepreneurial Government 2. M12 Assignment - Patents & Startups 3. M12 Quiz 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Saturday, Part C by Sunday 2. Sunday 3. Sunday
13	Crafting a Deployment Strategy	Read: Schilling Chapter 13 (28 pp) Ries Chapter 13 Epilogue (12 pp) Watch: Lecture Videos Listen: Podcast Freakonomics No new Ideas Submit: <ol style="list-style-type: none"> 1. Discussion 2. Quiz 3. Project Milestone 6 Revision & Reflection 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Sunday 2. Sunday 3. Sunday
14	Capstone	Watch: Lecture Videos Submit: <ol style="list-style-type: none"> 1. Project Simulation 2. M14 Reflection 	<ol style="list-style-type: none"> 1. Discussion Part A by Thursday, Part B by Sunday 2. Sunday

Additional Information and Resources

Accessibility:

This course is offered through an accessible learning management system. For more information, please refer to Canvas's [Accessibility Statement](#).

Requesting Accommodations:

The Office of Accessibility Resources and Services works in partnership with administrators, faculty, and staff to provide reasonable accommodations and support services for students with disabilities who have provided their office with medical documentation to receive services.

If you are in need of accommodations due to a disability, please contact the [Office of Accessibility Resources and Services](#) to discuss your specific needs.

Resources for NJIT Online Students

NJIT is committed to student excellence. To ensure your success in this course and your program, the university offers a range of academic support centers and services. To learn more, please review these [Resources for NJIT Online Students](#), which include information related to technical support.