**Strategic Management of Technological Innovation**

MASY1-GC 3310-103| Fall 2022 | 9/06/2022 - 12/13/2022 | Tuesdays | 3 Credits

Modality: In-Person

Course Site URL: https://brightspace.nyu.edu/

# General Course Information

**Name/Title:** Frederick Kauber, Adjunct Instructor

**NYU Email:** [Fred.Kauber@nyu.edu](mailto:Fred.Kauber@nyu.edu)

**Class Meeting Schedule:** 9/06/2022 - 12/13/2022 | Tuesdays / 6:20 pm - 8:55 pm ET

**Class Location:** Bldg: 7E12 Rm: LL27

**Office Hours:** Zoom or Phone Monday – Friday between 9 am ET and 4 pm ET. Please email me to schedule an appointment. In an emergency, please call my mobile on 914-953-3127.

# Description

This course prepares students to meet the demands of strategic planning in a technology-driven organization. It addresses optimizing the R&D (Research and Development) cycle, smooth transition from design to production, innovation streams, and integration of technology with business strategy. Focusing on case studies, students learn real-world technology decision-making strategies, including allocation of resources, managing complex technology initiatives, and management of technology teams. The course examines the role technological innovations play in the competitive dynamics of industries and the use of metrics to evaluate new product effectiveness and innovation performance. Students create individual proposals for applications of technological innovations to address business needs.

# Prerequisites

N/A

# Learning Outcomes

At the conclusion of this course, students will be able to:

* Apply innovation concepts to the management of technological innovation
* Apply analysis tools to determine the success potential of applying an innovation
* Apply an emerging technology to create economic benefit for an organization
* Design intellectual property protection strategies for the created innovations
* Create metrics to increase the success rate of technological innovation application projects

# Communication Methods

Be sure to turn on your [NYU Brightspace notifications](https://www.nyu.edu/servicelink/KB0018507) 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.

Credit students must use their NYU email to communicate. Non-degree students do not have NYU email addresses. Brightspace course mail supports student privacy and FERPA guidelines. The instructor will use the NYU email address to communicate with students. All email inquiries will be answered. **Both students and the instructor expect and deserve ongoing and timely feedback! “Only the sender is responsible for receipt of a communication.”**

All email communications **MUST** be sent from an NYU email account and receipt must be confirmed within 24 hours. If the sender does not receive a confirmation, they should assume that the email was not received and should either resend the email or otherwise contact the intended recipient. The email of record is available on both the sender’s and recipient’s netID@nyu.edu account. Non-degree students do not have NYU email addresses. Brightspace course-mail supports student privacy and FERPA guidelines.

Students have the opportunity to add their pronouns, as well as the pronunciation of their names, into Albert. Students can have this information displayed to faculty in Albert, Brightspace, and other NYU systems. Students can also opt out of having their pronouns viewed by their instructors.

<https://www.nyu.edu/students/student-information-and-resources/registration-records-and-graduation/forms-policies-procedures/change-of-student-information/pronouns-and-name-pronunciation.html>

# Structure | Method | Modality

This course is In-person and will meet once a week on Tuesday. Zoom is the online instruction platform used at NYU. Brightspace is the learning management system we will use for assignments, announcements, and emails. Students are expected to participate in all class sessions **including in class work using a laptop or tablet computer**. They are expected to check Brightspace, and their NYU email accounts at least once every day for changes to course meetings and/or assignments, how and when students will meet for class sessions or group work, whether the course will involve lecture or discussion, team projects, and so forth.

Students will develop a solid foundation in the strategic management of technological innovation by first understanding the industry dynamics of technological innovation, then learning how to formulate a technological innovation strategy, and then practicing its implementation. Most importantly they will also understand and have confidence in what they know and what else they need to know to practice at a higher professional level.

Prior to starting the course, students should be able to:

* Understand the basics of probability, statistics and decision–making
* Quickly search for, identify and then retrieve high-quality information
* Use Microsoft Word to write briefing reports, study guides, papers, etc., including citations and references in APA style, according to a predefined specification
* Use Microsoft Excel to analyze data, prepare tables and charts and insert them into documents

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](https://brightspace.nyu.edu/).

# 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. It is required that students attend all classes and are part of the group case studies that will take place in class. Each student is expected to contribute to the in-class discussions. Each session will require students to read the case studies prior to that session. Each student is required to contribute her or his own ideas, opinions and feedback during group discussions of the case study. To better facilitate discussion and student engagement, the class might be divided into groups for case analysis. Note that these groups will not remain static and will change during the semester.

* There will be 2 individual assignments on the specific topic(s) covered in the related classes.
* There will be 2 team case studies on the specific topics selected by the instructor.
* There will be a final case study centered on the specific industry selected by a team of students where students will design a plan for technological innovation, perform the study, and present the findings. This is intended as a team exercise but based on individual interest could be an individual project.
* Length of Assignments and Cases (excluding cover page and end reference page)
  + Assignments should be between 400 and 600 words
  + Case Studies should be between 600 and 800 words
* Length of Final Case Study (excluding cover page and end reference page)
  + The final case study should of the length sufficient to present feasible innovative solution to the problem.
* Late Submissions
  + - Assignments submitted late will not be accepted. Students shall submit their assignments via Brightspace.

## Assignments and Deadlines

Students are expected to complete individual readings and complete independent assignments during the course. Frequent and high-quality participation in class discussions is required. Readings, individual papers, teamwork, and class discussions will be assigned and graded weekly. The final case project will be announced at the beginning of the course, and it will be due by Class 14. The purpose of the project is to provide students with a hands-on experience with the intricacies, complexities, planning, meeting requirements, making presentation, and project reporting. Having completed the project, students are required to submit a final report, and prepare a presentation, which includes a deck of the project and its expectations. All team members should contribute to the case studies. Submit a single paper (pdf or doc) for the team identifying which team member contributed to which part of the case. Include your team number, team members, date, type each question and answers, and include in text and end references. The team cases will be evaluated on both an individual and group level. More details will be provided.

Please refer to the outline provided by the professor for Readings, Class Assignments and Cases. Please review the Grading Policy below.

**Submission of Deliverables**

Delivery occurs when a student’s work is available on the Brightspace Assignment folder for the course.

In the rare situation when a student believes they cannot meet a scheduled delivery date they should immediately contact the instructor and request for a modified delivery date. The request may or may not be granted depending on its content and the reason for not meeting the deadline. If granted, the student will receivea **written agreed new delivery date** (**Notes: VERBAL DOESN’T COUNT, and there is a 50% penalty per day for reception of your work beyond the originally ASSIGNED or AGREED NEW DUE DATE**)

## Course Technology Use

Most class sessions are planned to be in person, but any necessary remote sessions require use of Zoom. All class sessions require a network device such as iPad or Laptop with audio capabilities to participate in the classes. We will use Zoom technology for any online sessions. Each student will be required to perform research, type the assignments, and submit them to the instructor via NYU’s website.

**IT Service Desk**

(212)-998-3333

24 hours a day, 7 days a week

Email: [AskIT@nyu.edu](mailto:AskIT@nyu.edu)

**Zoom Support**

* [NYU Zoom Guide for Students](https://nyu.service-now.com/servicelink/search_results.do?sysparm_document_key=kb_knowledge,bd4d4732dbf34f008fd2a2364b961964&sysparm_search=zoom)
* Make sure you are using [NYU Zoom](https://www.nyu.edu/life/information-technology/communication-and-conferencing/meetings-chat-conferencing/nyu-zoom.html) to log-in for class
* Check the [NYU Zoom site](https://t.e2ma.net/click/pvdgzd/148ffmn/lccv1i) often for updates. (To update Zoom, you can also open from your desktop and click menu, then “Check for Updates.”)

**Brightspace Support**

* Log-in to the [Brightspace](https://brightspace.nyu.edu/d2l/home)platform or visit the [Student Training](https://www.nyu.edu/life/information-technology/instructional-technology-support/instructional-technology-tools-and-services/nyu-lms-brightspace/student-training-lms-brightspace.html) website.
* Video on how to [Navigate the Bright Space Learning Environment](https://youtu.be/aYXbSBZ-VxI)

## 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

Students are expected to attend all on-line class sessions. Excused absences are granted in cases of documented serious illness, family emergency, religious observance, or civic obligation. In the case of religious observance or civic obligation, this should be reported in advance. Unexcused absences from sessions may have a negative impact on a student’s final grade. Students are responsible for assignments given during any absence.

If for some reason (excused absence) you will not be in class, you must notify the instructor prior to the scheduled session if you will not be attending and the reason.

Each unexcused absence or being late may result in a student’s grade being lowered by a fraction of a grade. A student who has three unexcused absences may earn a Fail grade.

University Calendar Policy on Religious Holidays:

<https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/university-calendar-policy-on-religious-holidays.html>

Students who join the course during add/drop are responsible for ensuring that they identify what assignments and preparatory work they have missed and complete and submit those per the syllabus.

Refer to the [SPS Policies and Procedures page](https://www.sps.nyu.edu/homepage/student-experience/policies-and-procedures.html) for additional information about attendance.

# Textbooks and Course Materials

Required Textbooks

1. Schilling, M. A. (2021). *Strategic Management of Technological Innovation*. **7th** Edition, McGraw-Hill Education. ISBN: 978-1-26408093-9

This book is a part of the Follett Access program. This is an NYU Bookstore initiative that delivers required course materials digitally at the lowest possible price. The book for this course Strategic Management of Technological Innovation, will be delivered to you digitally through the CONNECT platform. Here is the - [link](https://includedcp.follett.com/2015).er

***Bookstore contact info:***

***email -***[*wsq.text@nyu.edu*](mailto:wsq.text@nyu.edu)

***phone -****212-998-4656*

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**Part One** **Industry Dynamics of Technological Innovation** 132. Sources of Innovation 153. Types and Patterns of Innovation 454. Standards Battles and Design Dominance 695. Timing of Entry 95

**Part Two** **Formulating Technological Innovation Strategy** 1156. Defining the Organization's Strategic Direction 1177. Choosing Innovation Projects 1478. Collaboration Strategies 1739. Protecting Innovation 199

**Part Three** **Implementing Technological Innovation Strategy** 22310. Organizing for Innovation 22511. Managing the New Product Development Process 25512. Managing New Product Development Teams 28513. Crafting a Deployment Strategy 305

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1. Yuri B. Aguiar (2020). *Digital (R)evolution: Strategies to Accelerate Business Transformation*. 1st Edition, John Wiley & Sons, ISBN-13: 978-1119619734, ISBN-10: 1119619734

**Brief Table of Contents**

**Preface**1. Drivers of Change 12. Focus and Discipline 173. Idea Incubation 274. Operational Excellence 455. Customer-Driven Change 576. Strategy vs. Execution 737. Hire Captains, Not Kings of Queens 858. Integrated Ecosystems 1019. Digital Proficiency and Innovation 12510. Are You “Digitally Determined” or “Digitally Distraught”? 13711. Use Case: The Smart City 15912. Looking Ahead: Runway or Precipice? 16913. AI: The Elephant in the Room 189

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## Required Papers

* Rita McGrath and Ryan McManus (2020). *Harvard Business Review*: Discovery-Driven Digital Transformation, Reprint: R2002J, May-June 2020

## Recommended Papers

* McGahan, A. M. (2000). How industries evolve. *Business Strategy Review*, *11*(3), 1-16.
* McGahan, A. M. (2004). How industries change. *Harvard Business Review*, *82*(10), 86-94.
* Nadan, J. S. (2014). Using innovation science to minimize entrepreneurial risk. In *Innovations in Technology Conference (InnoTek), 2014 IEEE* (pp. 1-7). IEEE.
* Porter, M. E. (2008) The Five Competitive Forces that Shape Strategy
* Ulwick, A. W. (2009). What Is Outcome-Driven Innovation® (ODI)? *White Paper, Strategyn*
* Michaelides, D. (2011). The art of innovation in the public sector. *International Journal of Innovation Science*, *3*(3), 117-126.

# Grading | Assessment

**Grading Rubric: % of Final Grade**

Class participation 10.0 %   
2 Industry Case Studies (Team) - 15 % each 30.0 %

(5% individual component, 10% team component)  
2 Homework Assignments (Individual) - 15 % each 30.0 %

Final Case Study (Individual) 30.0 %

(Paper 10%, Why do it 5%, Strategy 5%, Timing and ROI 10%

**Total 100.0 %**

Missed and unexcused classes will result in 5% penalty. After two missed unexcused classes the student will receive zero credit for class participation. Late assignments and cases will result in zero credit for that assignment/case.

The homework assignments and the final exam are to be completed individually. The case studies are to be worked on and completed in the assigned groups.

Students are expected to contribute to the class discussion in each lesson, with constructive and analytical comments. Participation is strongly encouraged. The objective is not a specific answer but to foster a debate around key issues.

With regard to the case studies students will be expected to work in groups and show a progressively more in-depth knowledge of their industry as the semester progresses. The focus of the assignments will advance from the descriptive and basic topics to the analytical and advanced subjects.

Homework assignments will focus on lesson topics. Students will be expected to provide, concise, tersely written papers reflecting a strong grasp of the subject matter*. There will be equal weightings for structure – clarity of presentation – and content.*

\*Please note that you will be provided with the parameters and the additional criteria on how you will be measured for each of the assessments listed above in class

*See the* [*“Grades” section of Academic Policies*](https://www.sps.nyu.edu/homepage/student-experience/policies-and-procedures.html#Graduate1) *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.*

# NYU SPS Graduate Grading Scale

|  |  |  |  |
| --- | --- | --- | --- |
| **A** | 95-100 | 4.000 | **Exceptional**: Demonstrates exceptional mastery of all learning outcomes of the course and thorough and complete understanding of all concepts. |
| **A-** | 90-94 | 3.667 | **Excellent**: Demonstrates highly competent mastery of all learning outcomes of the course and strong understanding of all concepts. |
| **B+** | 87-89 | 3.333 | **Very Good; exceeds course standards**: Demonstrates mastery of all learning outcomes of the course and understanding of core concepts. |
| **B** | 83-86 | 3.000 | **Good; meets course standards**: Demonstrates mastery of some learning outcomes; understanding of some core concepts could be improved. |
| **B-** | 80-82 | 2.667 | **Somewhat Satisfactory; meets some course standards and requires improvement**: Demonstrates basic understanding of some learning outcomes; improved understanding of all core concepts is needed. |
| **C+** | 77-79 | 2.333 | **Less than Satisfactory; requires significant improvement**: Demonstrates partial understanding of all learning outcomes and core concepts; requires significant improvement. |
| **C** | 73-76 | 2.000 | **Unsatisfactory; requires substantial improvement**: Demonstrates partial understanding of some learning outcomes and core concepts; requires substantial improvement. |
| **C-** | 70-72 | 1.667 | **Unsatisfactory; requires extensive improvement**: Demonstrates poor understanding of all learning outcomes and core concepts; requires extensive improvement. |
| **F** | Below 70 |  | **Fail**: Demonstrates minimal to no understanding of all key learning outcomes and core concepts; work is unworthy of course credit towards the degree. |

[From NYU SPS Policies and Procedures](https://www.google.com/url?q=https://www.sps.nyu.edu/homepage/student-experience/policies-and-procedures.html&sa=D&source=editors&ust=1660661380093969&usg=AOvVaw2elqt7KXgLltqeG8wXnOx2)

# Course Outline

**Start/End Dates:** 9/06/2022 - 12/13/2022 | Tuesdays

**Time:** 6:20 pm - 8:55 pm ET

**No Class Date(s):** No class date: Tuesday, 10/11/2022 - Legislative Day

**Special Notes:** Due to Legislative Monday, there will be no class on Tuesday, October 11, 2022. This day is reserved for Monday class sessions only.

## Class 1: 09/06/22

**Outline of Topics:**

Introduction:

* Introductions of students and instructor
* Review of Syllabus
* Introduction to the Course and Overview of Course Requirements and Assignments
  + Introduction Chief Innovation Officer
  + Applied Digital Transformation

Reading:

* None

## Class 2: 09/13/22

**Outline of Topics:**

Introduction:

* Introductions of students and instructor
* Review of Syllabus
* Introduction to the Course and Overview of Course Requirements and Assignments

Topics:

* Strategic Management of Technological Innovation – Chapter 1 - Introduction
  + Introduction candidate for digital disruption?
  + Why discovery-driven digital transformation is needed?
  + How to get from the current state to the digital level?

Topics Part 2:

* Strategic Management of Technological Innovation – Chapter 2 – Sources of Innovation
  + Translating creativity into innovation
  + Innovation in collaborative networks
* Digital (R)evolution - Chapter 2 – Focus and Discipline
  + Who is responsible for transformation?
  + How to identify the opportunity to discover specific problems that can be addressed in a digital solution?
  + How different are the “Always-on” digital natives?
  + What is needed for your immediate survival?
  + Does discovery-driven digital transformation need to be micromanaged?

Reading:

* Strategic Management of Technological Innovation – Chapter 1 – Introduction
* Digital (R)evolution - Chapter 1 – Drivers of Change
* Harvard Business Review: Discovery-Driven Digital Transformation by Rita McGrath and Ryan McManus
* Strategic Management of Technological Innovation – Chapter 2 – Sources of Innovation
* Digital (R)evolution - Chapter 2 – Focus and Discipline

**Deliverables: Form Teams for All Case Study Assignments**

## Class 3: 09/20/22

Topics:

* Strategic Management of Technological Innovation – Chapter 3 – Types and Patterns of Innovation
  + Types of innovation
  + Technology S-Curve
  + Technology Cycles
* Digital (R)evolution - Chapter 3 – Idea Incubation
  + Why innovation is essential for success?
  + What’s the challenge with the digital transformation in high-performing organizations?
  + How to overcome inclination to risk avoidance?
  + Why organizations need empowered champions?
  + Why most of the organizations struggle with the transformation?
  + How to approach and propose the transformation?

Topics Part 2:

* Strategic Management of Technological Innovation – Chapter 4 – Standard Battles, Modularity, and Platform Competition
  + Why dominant designs are selected?
  + Multiple dimensions of value
  + Modularity and platform competition
* Digital (R)evolution - Chapter 4 – Operational Excellence
  + What’s the relationship between operational excellence and customer experience?
  + Who are your customers in the “service” economy?
  + How to use data and analytics to make a case to executives and others?
  + Where to look for the problems and pain points?
  + Is the response time or solution time that matter?

Assignment 1

* Digital (R)evolution - Chapter 1-3
  + Review the relevant materials
  + Research the topic
  + Answer the following questions:
    - Is your company/industry a candidate for digital disruption?
    - What is needed for your company/industry’s immediate survival?
    - Why do most of organizations struggle with the innovation transformation?

Reading:

* Strategic Management of Technological Innovation – Chapter 3 – Types and Patterns of Innovation
* Digital (R)evolution - Chapter 3 – Idea Incubation
* Strategic Management of Technological Innovation – Chapter 4 – Standard Battles, Modularity, and Platform Competition
* Digital (R)evolution - Chapter 4 – Operational Excellence

**Deliverables: Individual Assignment 1 – Due** 10/04/22

## Class 4: 09/27/22

**Topics:**

* Strategic Management of Technological Innovation – Chapter 5 – Timing of Entry
  + First-mover advantages
  + First-mover disadvantages
  + Strategies to improve timing options
* Digital (R)evolution - Chapter 5 – Customer-Driven Change
  + What’s more important: People or Technology?
  + Why organizations struggle and become irrelevant?
  + What are the principles of successful transformation?
  + Is your digital workforce digitally proficient?

Reading:

* Strategic Management of Technological Innovation – Chapter 5 – Timing of Entry
* Digital (R)evolution - Chapter 5 – Customer-Driven Change
* Rita McGrath and Ryan McManus (2020). *Harvard Business Review*: Discovery-Driven Digital Transformation, Reprint: R2002J, May-June 2020

**Deliverables: None**

## Class 5: 10/04/22

Topics:

* Strategic Management of Technological Innovation – Chapter 6 – Defining the Organization’s Strategic Direction
  + Assessing the firm’s current position
  + Identifying core competencies and dynamic capabilities
  + Strategic Intent
* Digital (R)evolution - Chapter 6 – Strategy vs. Execution
  + When is the last time you have communicated the digital strategy?
  + What does it mean to be a transformational leader?
  + How to set a winning transformation strategy?
  + What could and will derail the transformation initiatives?
  + How to get the “wagon” back on the track?

Reading:

* Strategic Management of Technological Innovation – Chapter 6 – Defining the Organization’s Strategic Direction
* Digital (R)evolution - Chapter 6 – Strategy vs. Execution

**Deliverables: Team Case Study 1 – Due** 10/18/22

Case 1

* Tesla, Inc. in 2021 – Strategic Management of Technological Innovation – Chapter 6, page 117
  + Read and analyze the case
  + Research the topic
  + Answer the six questions on page 125

**NOTE: No class on 10/11.**

## Class 6: 10/18/22

Topics:

* Strategic Management of Technological Innovation – Chapter 7 – Choosing Innovation Projects
  + The development budgets
  + Quantitative methods for choosing projects
  + Disadvantages of quantitative methods
  + Qualitative methods for choosing projects
  + Combining quantitative and qualitative information
* Digital (R)evolution - Chapter 7 – Hire Captains, Not Kings or Queens
  + Why hiring is so difficult?
  + Are people assets or liability?
  + Who are the most valuable players?
  + Is reverse mentoring beneficial to companies?
  + Can you teach passion?

Reading:

* Strategic Management of Technological Innovation – Chapter 7 – Choosing Innovation Projects
* Digital (R)evolution - Chapter 7 – Hire Captains, Not Kings or Queens

**Deliverables: Final Case Study Industry Selected by Teams**

## Class 7: 10/25/22

Topics:

* Strategic Management of Technological Innovation – Chapter 8 – Collaboration Strategy
  + Reasons for going solo
  + Advantages of collaborating
  + Types of collaborative arrangements
  + Choosing a mode of collaboration
  + Choosing and monitoring partners
* Digital (R)evolution - Chapter 8 – Integrated Ecosystems
  + Why people think of Digital Transformation as back-office processes?
  + Why social collaboration is a prerequisite to digital transformation?
  + Why it is so difficult for users to adopt new technologies?
  + What’s the strategy to deal with knowledge workers?
  + How to solve the information overload challenge?

Reading:

* Strategic Management of Technological Innovation – Chapter 8 – Collaboration Strategy
* Digital (R)evolution - Chapter 8 – Integrated Ecosystems

**Deliverables: None.**

## Class 8: 11/01/22

Topics:

* Strategic Management of Technological Innovation – Chapter 9 – Protecting Innovation
  + Appropriability
  + Patents, trademarks, and copyrights
  + The effectiveness and use of protection mechanisms
* Digital (R)evolution - Chapter 9 – Digital Proficiency and Innovation
  + Has the advanced technology become commodity?
  + Why digital proficiency is more important than transformational technologies?
  + How to lead discovery-driven digital transformation?
  + Are the robots taking the world over?
  + Where do humans fit in the digital revolution?

Reading:

* Strategic Management of Technological Innovation – Chapter 9 – Protecting Innovation
* Digital (R)evolution - Chapter 9 – Digital Proficiency and Innovation

**Deliverables: Innovative Idea Individual Presentation – High Level**

**Team Case Study 2 – Due** 11/15/22

Case 2

* The Patent Battle over CRISPR-Cas9 Gene Editing – Strategic Management of Technological Innovation – Chapter 9, page 199
  + Read and analyze the case
  + Research the topic
  + Answer the four questions on page 201

## Class 9: 11/08/22

Topics:

* Strategic Management of Technological Innovation – Chapter 10 – Organizing for Innovation
  + Size and structural dimensions of the firm
  + Structural dimensions of the firm
  + Modularity and “Loosely Coupled” organizations
  + Managing innovation across borders
* Digital (R)evolution - Chapter 10 – Are you” Digitally Determined” or “Digitally Distraught”?
  + What’s your digital strategy?
  + Why digital transformation seems to be confusing?
  + What is your definition of digital transformation?
  + What are your fundamental digital transformation objectives?
  + Determined or distraught?

Reading:

* Strategic Management of Technological Innovation – Chapter 10 – Organizing for Innovation
* Digital (R)evolution - Chapter 10 – Are you” Digitally Determined” or “Digitally Distraught”?

**Deliverables: Individual Assignment 2 – Due** 11/22/22

Assignment 2

* Digital (R)evolution - Chapter 9-10,12
  + Review the relevant materials
  + Research the topic
  + Answer the following questions:
    - Has advanced technology become a commodity?
    - Are robots taking over the world?
    - What is your definition of digital innovation?
    - What does “User Experience” mean to humans and robots (Ch12)?

## Class 10: 11/15/22

Topics:

* Strategic Management of Technological Innovation – Chapter 11 – Managing the New Product Development Process
  + Objectives of the new product development process
  + Sequential versus partly parallel development process
  + Product champions
  + Involving customers and suppliers in the development process
  + Tools for improving the new product development process
  + Tools for measuring new product development performance
* Digital (R)evolution - Chapter 11 – Use Case: The Smart City
  + What are the boundaries of digital transformation?
  + Why system of systems needs digital connectivity?
  + What are the areas of smartness?
  + Why changing people’s habits is more important than changing the technology?

Reading:

* Strategic Management of Technological Innovation – Chapter 11 – Managing the New Product Development Process
* Digital (R)evolution - Chapter 11 – Use Case: The Smart City

**Deliverables: None**

## Class 11: 11/22/22

Topics:

* Strategic Management of Technological Innovation – Chapter 12 – Managing New Product Development Teams
  + Constructing new product development teams
  + The structure of new product development teams
  + The management of new product development teams
* Digital (R)evolution - Chapter 12 – Looking Ahead: Runway or Precipice?
  + How intelligent is Artificial Intelligence?
  + Why will robots not take your job?
  + What does “User Experience” mean to humans and robots?
  + What happens when great platforms go down?
  + Why are people fooled by the look and feel?

Reading:

* Strategic Management of Technological Innovation – Chapter 12 – Managing New Product Development Teams
* Digital (R)evolution - Chapter 12 – Looking Ahead: Runway or Precipice?

**Deliverables: None**

## Class 12: 11/29/22

Topics:

* Strategic Management of Technological Innovation – Chapter 13 – Crafting a Deployment Strategy
  + Launching Timing
  + Licensing and compatibility
  + Pricing
  + Distribution
  + Marketing
* Digital (R)evolution - Chapter 13 – AI: The Elephant in the Room
  + What AI is and is not?
  + What’s the impact of AI on the workplace?
  + Is AI capable to find needles in haystack?
  + Is there a difference between AI and Data Science?
  + Why Discovery-Driven Digital Transformation is the answer?

Reading:

* Strategic Management of Technological Innovation – Chapter 13 – Crafting a Deployment Strategy
* Digital (R)evolution - Chapter 13 – The Elephant in the Room

**Deliverables:** **Reminder - Final Team Case Study Presentation Due 12/13/22**

**Class 13: 12/06/22**

Topics:

* Final Case Presentation Working Session and Draft Discussion
* Course review

Reading:

* None

**Deliverables:** **Reminder - Final Team Case Study Presentation Due 12/13/22**

## Class 14: 12/13/22

Topics:

* Final Case Presentation
* Course wrap-up

Reading:

* None

**Deliverables:** **Final Team Case Study Presentation DUE TODAY**

**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*](https://www.sps.nyu.edu/homepage/about-us/idbea/about-idbea.html)).

# New York University School of Professional Studies Policies

1. Policies - You are responsible for reading, understanding, and complying with [University Policies and Guidelines](http://www.nyu.edu/about/policies-guidelines-compliance.html), [NYU SPS Policies and Procedures](http://sps.nyu.edu/academics/academic-policies-and-procedures.html), and [Student Affairs and Reporting](https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/student-services.html).

2. Learning/Academic Accommodations - 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](https://www.nyu.edu/students/communities-and-groups/student-accessibility.html). If you are interested in applying for academic accommodations, contact the [Moses Center](https://www.nyu.edu/students/communities-and-groups/student-accessibility/academic.html) 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](https://www.nyu.edu/students/communities-and-groups/student-accessibility.html) as soon as possible ([mosescsa@nyu.edu](mailto:mosescsa@nyu.edu) | 212-998-4980).

3. Health and Wellness - To access the University's extensive health and mental health resources, contact the [NYU Wellness Exchange](https://www.nyu.edu/students/health-and-wellness/wellness-exchange.html). 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. Student Support Resources - 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](https://www.sps.nyu.edu/homepage/student-experience/resources-and-services.html).

5. Religious Observance - 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](https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/university-calendar-policy-on-religious-holidays.html) for the complete policy.

6. Academic Integrity and Plagiarism - 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](https://www.nyu.edu/servicelink/KB0018471), 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](https://www.sps.nyu.edu/homepage/student-experience/policies-and-procedures.html) page.

7. Use of Third-Party Tools - 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.