67600 Course Outline (Updated: 10/12/2025)

Course Code : BSN3701
Course Title : Technological Innovation
Semester : Semester 2, Academic Year 2024
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Overview

Technology has played a significant role in shaping societies and businesses. This course aims to provide students with a strong conceptual foundation to understand the dynamic process of technological innovation from a business perspective. Students will gain insight into the importance of technological innovation as a driver of value creation and economic growth.
This course is grounded in theory and research but takes a practice-oriented approach. Students will explore challenges and opportunities in technological innovation through real-world case studies.

Course Objectives

This course develops frameworks for analyzing strategic issues faced by firms in technology-intensive industries. Students will focus on practical strategic issues applicable in the real world rather than on complex technology descriptions. No technical background is required to take this course. However, due to the emphasis on the case method, students should bring a curious mindset and a keen desire to learn. Be prepared for class discussions, debates, and peer-to-peer learning.

Who should take this course?

This course is designed for undergraduate students. It can be taken as part of the Minor in Technopreneurship program offered by the NUS Business School. There is no formal prerequisites for this course.

General Guide & Reading (e.g. Case preparation guide, project report guide, main textbook & supplementary materials, etc)

The course requires a good amount of reading and reflection in between classes. Reading material will be provided in each classes. There is no required textbook for the course.

You are expected to read the assigned material before each class. During the class, we will focus on discussions, analysis, and reflections.

Assessment

Assessment Components	Weightage
Class Attendance	10%
Class Contribution (Participation and Reflection)	30%
Individual Assignment	20%
Group Project	40%

1. Class Attendance and Class Contribution (10%+ 30%):

This is a case-based course. To prepare for class, you must read and reflect on assignments beforehand. Your participation will be evaluated based on your ability to contribute comments that are insightful, relevant, and progressive-comments that build on the discussion and help move it forward rather than simply repeat previous points.

I will be looking for the quality of your contributions, so significant 'airtime' is not necessary to earn a high participation grade. (For example, if you offer a single key insight that adds value to a session, you'll receive the maximum participation grade for that session.)

To assist in your preparation, I will distribute key questions for each case, which will guide the direction of our in-class discussions.

Please come to every class ready to discuss the assigned case. Since a significant portion of your grade is based on class participation, attendance at each session is crucial. Missing a class will impact both your experience and that of your classmates, so attendance will be recorded weekly.

There will also be reflection submissions throughout the course, with more details on the format provided later.

2. Individual Assignment (20%)
The Individual Assignment will be due towards the end of the semester. More details on this will be shared closer to the date.

3. Group Project: Company Assessment (Total: 40%)

In a group of five members, you will conduct an in-depth analysis of a selected company's technology strategy. The project should offer a critical evaluation supported by the theoretical readings and frameworks covered in class.
Deliverables: Project Report (20%) and Final Presentation (20%)
Project Report: Your project report should clearly explain the company's technology strategy and the major strategic issues it faces.
Final Presentation: The group will deliver an in-person presentation that highlights the key insights and recommendations from your report.

In your analysis, consider the following elements where relevant:

- The company's competitors and the maturity of its industry
- Potential technology or market shifts that may reshape the industry
- Sources of innovation within the industry and within the firm
- The firm's intellectual property position and key competencies
- Product development stage and appropriability regime
- Financial health, including access to capital and capital structure
- Strengths and characteristics of its alliances and partnerships

Based on your analysis, assess the attractiveness and sustainability of the company's position within its industry segment.
(It is highly recommended that you establish a contact within the company and conduct an interview, although field interviews are not strictly required to complete the assignment.)

Academic Honesty & Plagiarism

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

Plagiarism is "the practice of taking someone else's work or ideas and passing them off as one' own" (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. In case of any doubt, you should consult your instructor.

Additional guidance is available at:

- http://www.nus.edu.sg/registrar/administrative-policies-procedures/acceptance-record#NUSCodeofStudentConduct
- http://nus.edu.sg/osa/resources/code-of-student-conduct

About me . . .

Hi, I am an Investor-CEO-turned-Professor with a passion for technology and innovation. Known for bringing creativity into things I do, I draw on real-life experience from both multinational corporations and startups to show you how to turn today's opportunities into successful careers. Join me to learn how technology is reshaping industries—and how you can be part of that change!

Schedule and Outline

Week 1 (12Jan-16Jan)	**Introduction to Technological Innovation** Topics: Overview of technological innovation, definitions, types of innovation (incremental vs. radical), and its importance in business.
Week 2 (19Jan-23Jan)	**Theories and Models of Innovation** Topics: Exploration of key theories (e.g., S-curve, diffusion of innovation) and frameworks (e.g., the Technology Adoption Lifecycle, Open Innovation).
Week 3 (26Jan-30Jan)	**Innovation in Emerging Technologies (1/3)** **BioTech (Including Climate Tech & Food Tech)** **Topics Covered**: Exploring recent technological advancements of BioTech and their business impact.
Week 4 (2Feb-6Feb)	**Innovation in Emerging Technologies (2/3)** **Artificial Intelligence** **Topics Covered**: Exploring recent technological advancements of AI and their business impact.
Week 5 (9Feb-13Feb)	**Innovation in Emerging Technologies (3/3)** **Fintech** **Topics Covered**: Exploring recent technological advancements of Fintech and their business impact.
Week 6 (16Feb-20Feb)	**Business Models and Technological Innovation** Topics Covered: How technological innovations enable new business models (e.g., platform business models, subscription services).
21Feb-1Mar	***** Recess *****
Week 7 (2Mar-7Mar)	**Group Project Interim Presentation**
Week 8 (9Mar-13Mar)	**Market Strategy and Technological Innovation** Topics Covered: Market entry strategies, timing of entry, and the role of partnerships in technology innovation.
Week 9 (16Mar-20Mar)	**AI: The disruption is here** **Topics:** Is AI the villain or the saviour? Will AI make us more human?
Week 10 (23Mar-27Mar)	**The Future of Technological Innovation** Topics Covered: Emerging trends and ethical considerations
Week 11 (30Mar-3Apr)	**Reinvention in the face of Technology** **Topics: The Reinvention of Kodak**

Week 12 (6Apr-10Apr)	**Final Presentation (Part 1)**
Week 13 (13 April-17Apr)	**Final Presentation (Part 2)**