The purpose of this course is to expose you to the dynamics of industries driven by technological innovation, and to train you to think strategically about technological innovation and new product development and deployment. In this course, we will tackle such questions as:

- How and why are dominant standards chosen in “winner-take-all” industries?
- How do firms decide whether go “go it alone” or collaborate, and how do firms develop an effective collaboration strategy?
- How do firms make the difficult choice between protecting their technologies with patents or copyrights, versus rapidly disseminating them to build installed base and complementary goods?
- How can firms deploy their new innovation in a way that will jumpstart its adoption?

The course will use a combination of lecture, discussion and exercises. Like the industries we will study, the course will be fast-paced, and every effort will be made to make the class both challenging and exciting. Because of the fast-paced nature of the course, it is vitally important that you come to class prepared and ready to discuss the topics. If you stay up on the material you will learn more during the discussions and be successful at the assignments.

GRADE BREAKDOWN
Preparation and Participation:

<table>
<thead>
<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>Class Discussion and in-class exercises</td>
<td>25</td>
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<tr>
<td>Homeworks</td>
<td>45</td>
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<tr>
<td>Final Exam</td>
<td>30</td>
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<td><strong>Total</strong></td>
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Class discussion & in-class exercises: We will use a variety of in-class exercises to give you opportunities to apply and deepen your knowledge of the course content. Some of these will be turned in for participation points. I may also adjust your total for this grade based on the quality of your voluntary participation in class. There is no way to make-up in-class participation or exercises.

Homework: There are five homework assignments due during the semester, as indicated in the course schedule. Three of them are individual assignments, and two will be completed as a team. Homework turned in late will be penalized.

Final Exam: The final exam will be closed book and cover material from the required reading.

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<tr>
<th>CLASSROOM POLICIES</th>
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<td>We will use the Stern default classroom policies:</td>
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**Laptops, Smartphones, & Other Electronic Devices:** May not be used in class.

**Attendance:** Required and part of grade. Faculty will excuse absences only in the case of documented serious illness, family emergency, religious observance, or civic obligation. If you will miss class for religious observance or civic obligation, you must inform your instructor no later than the first week of class. Recruiting activities are not acceptable reasons for absence from class. Absence from the first day of an intensive course will result in removal from the course.

**Arriving Late, Leaving Early, Coming & Going:** Students are expected to arrive to class on time and stay to the end of the class period. Arriving late or leaving class early will have impact on the course grade.
Students may enter class late only if given permission by the instructor and can do so without disrupting the class.
(Note that instructors are not obligated to admit late students or may choose to admit them only at specific times and instructors are not obligated to readmit students who leave class.)

**Late Submission of Assignments:** Late assignments will either not be accepted or will incur a grade penalty unless due to documented serious illness or family emergency. Instructors will make exceptions to this policy for reasons of religious observance or civic obligation, only when the assignment cannot reasonably be completed prior to the due date and the student makes arrangements for late submission with the instructor in advance.

**General Behavior:** Students will conduct themselves with respect and professionalism toward faculty, students, and others present in class and will follow the rules laid down by the instructor for classroom behavior. Students who fail to do so may be asked to leave the classroom.
(Honor Code and Stern policy)

**Collaboration on Graded Assignments:** Students may not work together on graded assignment unless the instructor gives express permission. (Honor Code)
## SCHEDULE

<table>
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<tr>
<th>Class</th>
<th>Topics and Readings</th>
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| 1     | **Introduction & Sources of Innovation**  
         Text, Chapter 2  
         Prepare: Nikola Tesla short case; Thomas Edison short case (both on course website)  
         Be prepared to discuss the following in class:  
         1. How were the two men similar and different?  
         2. What do you think enabled each to be significantly innovative?  
         3. What factors were impeded them in achieving their objectives?  
         4. Can you identify contemporary innovators you think are similar to Tesla? Similar to Edison? | |
| 2     | **Types and Patterns of Innovation**  
         Text, Chapter 3  
         Prepare and bring to class, ready to discuss:  
         1. Identify an innovation you find interesting.  
         2. Explain why you think the innovation is radical or incremental, and whether it is competence enhancing or competence destroying (and from whose perspective).  
         3. Draw where you think this innovation is on the S-curve of performance improvement.  
         4. Draw where you think this innovation is on the diffusion curve (i.e., what category of adopters do you think it has reached?)  
         5. Does this innovation disrupt a different technology’s s-curve? Is this innovation at risk of being disrupted by a different technology’s s-curve?  
         **In Class Exercise 1: Technology Trajectaries** | |
| 3     | **Standards Battles and Design Dominance**  
         Text, Chapter 4  
         Prepare (HW1: Complete individually, turn in as typed assignment at beginning of class – 2 single-spaced pages max; bullet points or numbered lists preferred):  
         Search on the internet to answer the following questions about the smartphone industry:  
         1. What is the global market share of the Android operating system?  
         2. What is the global market share of the iOS operating system?  
         3. How many apps are available for each of the operating systems above?  
         Then, from your own opinion, answer the following questions:  
         1. Will the market select one winner? Why or why not?  
         2. Whose operating system offers the most standalone utility? (quality, beauty, functionality, etc.)  
         3. Whose app ecosystem is “better”?  
         4. Are there likely to be different market segments that have very different preferences for different dimensions of value in smartphones?  
         5. How much does price matter? How much does “openness” (i.e., Android can be licensed by multiple phone manufacturers) matter? | |
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<th>Week</th>
<th>Topic</th>
<th>Assignment</th>
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| 4    | Collaboration Strategies | Text, Chapter 8  
In Class: Global Strategy Game  
**HW 2: Complete individually, due at beginning of class (one page max):** Find an example of a current/recent innovation collaboration between two or more organizations and using the material in the chapter and your research on the collaboration, answer the following:  
1. Who are the partners and what is the innovation they are trying to develop?  
2. What does each party bring to the collaboration?  
3. How is the collaboration structured? (e.g., licensing agreement, JV, etc.)  
4. What do you see as the major advantages and disadvantages of this collaboration? |
| 5    | Protecting Innovation | Text, Chapter 9  
In Class exercise 2: Intellectual Property Quiz Show |
| 6    | Crafting a Deployment Strategy | Text, Chapter 13  
**HW 3:** Teams will develop a pitch (including powerpoint slides) for a deployment strategy for a new innovation. |
| 7    | Final Exam | *This schedule is a guideline only; the instructor reserves the right to change the schedule as necessary.* |