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Overview
This course is an introduction into information technology and its influence on business practices and the economy. The objectives of the course are as follows:

First, as a future knowledge worker you will use personal information technology systems in your work every day. You need to know how to publish information on the Internet, model and analyze decisions using a spreadsheet, and get information from relational databases. Over this course, your in-class conceptual learning of these topics will be complemented by a set of computer-based self-learning tools.

Second, in the digital firm, you will be involved increasingly in decisions about information systems. You will therefore need to recognize the large-scale systems that run modern organizations, understand what drives the success of a company’s IT investments, and learn how these investments facilitate effective business strategy and emerging business models.

Third, you must know how to evaluate and analyze information-based products and services in the increasing number of industries that are being transformed by information technology. You will learn about the unique economics of information pricing, technological lock-in and network effects, so that you can perform informed business analysis and formulate effective strategy in the digital economy.

We will also discuss a set of special topics, which may include digital music, information privacy, data mining, computer forensics and digital piracy. Assignments, projects and case studies through the course will reinforce your learning of how to use information technology to solve business problems.

Logistics
The course meets from 3:40 pm-6:50 pm on Monday and Wednesday at TISC UC 19. The required text for the course is Information Systems: A Manager’s Guide to Harnessing Technology & Flat World Knowledge (v1.1) by John Gallaugher, available at:

1 Courtesy of Lauren Goggins
http://www.flatworldknowledge.com/printed-book/227252. You can access the textbook for free online, download and print the text at home for $25, or order the textbook from the site for $35-70.

Course web site
Blackboard is a web-based application that houses online materials for enrolled students across NYU. You can access our course by logging into http://sternclasses.nyu.edu (using your Stern netID/password), and choosing the course titled Information Technology in Business and Society. We will be using Blackboard extensively for this course, so make sure that you log in and get familiar with the course web site as soon as possible. Let us know if you have any problems accessing the Blackboard site or seeing the course.

Assessment
During this course, you will be assigned two individual assignments and one group project. Also, you will have one midterm examination and one final examination. You are expected to participate in classroom and online discussions. The breakdown of points (out of a total of 500) for each of these components is:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation &amp; Assignments</td>
<td>125</td>
</tr>
<tr>
<td>Midterm</td>
<td>125</td>
</tr>
<tr>
<td>Group Project</td>
<td>100</td>
</tr>
<tr>
<td>Final</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>500</strong></td>
</tr>
</tbody>
</table>

Each assignment and project will provide you with a set of instructions and grading guidelines. Expect to use Excel, Access and the Web extensively. The midterm and the final examinations are closed book, meaning no use of textbooks, notes, computers, iPods, smartphones, etc. As the date of the exams near, we will discuss their format and content.

To ensure fair and consistent grading across core courses in Stern, we will base the final letter grade on the total points at the end of the course. The final letter grades will be distributed following the Stern Grading Guidelines for Core Courses at the Undergraduate College with a max of 35% As and 5-10% Cs. For more information about the grading guidelines, read “Teaching and Grading at the NYU Stern Undergraduate College” at www.stern.nyu.edu/uc/grading.

Classroom Expectations
Class attendance is essential to your success in this course and is part of your final evaluation. Where possible, notify me in advance of an excused absence.
Make sure that you check the **Course Documents section of the course web site before every session** -- you will find a document for every classroom session, which will contain detailed information about pre-class readings, a copy of the class slides, and information about assignments or projects. Class readings may be supplemented by selected online content, which you can access from the **Documents and Slides** section of Blackboard.

The classroom discussion presents a unique opportunity for you to develop and enhance your confidence and skills in articulating a personal position, sharing your knowledge, and reacting to new ideas. All of you have personal experience with information technology that can enhance our understanding of the subject, and that we want to encourage you to share. You should come to each class prepared to:

- Listen attentively
- Demonstrate having read and thought about the assigned material
- Show interest in your peers’ comments, questions, and presentations
- Contribute thoughtful comments or questions about the topic

The grade we assign for your class participation is a careful, subjective assessment of the value of your input to classroom learning. We keep track of your contributions towards each class session, and these contributions can include (but are not restricted to) raising questions that make your classmates think, providing imaginative yet relevant analysis of a situation, contributing background or a perspective on a classroom topic that enhances its discussion, and simply answering questions raised in class. Emphasis is placed on the quality of your contribution, rather than merely on its frequency.

**A lack of preparation or negative classroom comments or improper behavior** (such as talking to each other, late arrivals, sleeping in the class or walking out of the class while the lecture is in progress) will lower this grade. Cell phones, smart phones and other electronic devices are a disturbance to both students and professors. All electronic devices must be turned off prior to the start of each class meeting. 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 a negative impact on a student’s grade. Students may enter class late only if given permission by the instructor and can do so without disrupting the class.

The Stern School expects that 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.
Assignments & Group Project
Assignments will be due by 11:59pm on the specified due date. In submitting the assignments, you should account for the time needed to upload the document onto Blackboard. Late assignments will be accepted and graded, but you will only receive 50% of your final score. If you cannot complete the assignment prior to the due date for reasons of religious observance or civic obligation, you must make arrangements for late submission in advance.

The group project should be done in groups of 4 or 5 students. After you have posted your personal Blackboard page, your classmates will know you better, and this will help facilitate the group formation process. During the semester, your TA will facilitate this process further, and we will give you a set of detailed guidelines about working in teams. You will also be asked to evaluate the contribution of each of your team members after the group project.

Academic Integrity
Students **may not work together** on graded assignment unless given express permission. Collaborating on graded assignments with other students without permission is a violation of the Stern Honor Code. Getting help to complete the graded assignments from students that attended the class in the past is also a violation of the Stern Honor Code. The Stern Student Code of Conduct applies to **all students enrolled in Stern courses**. For more information, you can find the entire Stern Code of Conduct for the Undergraduate College at: [http://www.stern.nyu.edu/uc/codeofconduct](http://www.stern.nyu.edu/uc/codeofconduct). **Violating the Stern Honor Code results in an “F” grade in the class and will be referred to the Stern Discipline Committee for further examination.**

Integrity is critical to the learning process and to all that we do here at NYU Stern. As members of our community, all students agree to abide by the NYU Stern Student Code of Conduct, which includes a commitment to:

- **Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.**
- **Clearly acknowledge the work and efforts of others when submitting written work as one’s own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.**
- **Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct.**
also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

To help ensure the integrity of our learning community, prose assignments you submit to Blackboard may be submitted to Turnitin. Turnitin will compare your submission to a database of prior submissions to Turnitin, current and archived Web pages, periodicals, journals, and publications. Additionally, your document will become part of the Turnitin database.

Session Descriptions
The session topics and deliverables are subject to change over the semester. Always refer to the course website on Blackboard for the latest information.

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<thead>
<tr>
<th>Class</th>
<th>Topic</th>
<th>Date</th>
<th>Deliverables</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>May 29</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>IT, Strategy and Competitiveness</td>
<td>Jun 3</td>
<td>Assignment 1 (due 6/6 11:59pm)</td>
</tr>
<tr>
<td>3</td>
<td>How Computers &amp; the Internet work</td>
<td>Jun 5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Data Mining, Databases, and Intelligent Decision Support</td>
<td>Jun 10</td>
<td>Assignment 2 (due 6/13 11:59pm)</td>
</tr>
<tr>
<td>5</td>
<td>Computer crime and security</td>
<td>Jun 12</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Midterm</td>
<td>Jun 17</td>
<td>Assignment 3 (due 6/20 11:59pm)</td>
</tr>
<tr>
<td>7</td>
<td>Social Media and Information Privacy</td>
<td>Jun 19</td>
<td>Midterm</td>
</tr>
<tr>
<td>8</td>
<td>Network Effects</td>
<td>Jun 24</td>
<td></td>
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<tr>
<td>9</td>
<td>Web Search, Advertising, and the Search Economy</td>
<td>Jun 26</td>
<td></td>
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<tr>
<td>10</td>
<td>Digital Goods, Intellectual Property and Digital Rights</td>
<td>Jul 1</td>
<td>Group Project (due 7/4 11:59pm)</td>
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<tr>
<td>11</td>
<td>Group presentation</td>
<td>Jul 3</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Final Exam</td>
<td>Jul 8</td>
<td>Final Exam</td>
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</table>

*IT, Strategy and Competitiveness*
We will cover Porter’s framework of industry competitiveness and apply it to understand how IT has transformed industries such as movie rentals, fashion, or long-distance telephony.
How Computers & the Internet Work
We will cover a select set of IT concepts: digitization, basic computer architecture and Moore’s Law, operating systems, applications, and how these lead to powerful shared IT platforms in business. We will discuss how the Internet works, including the business structure of the Internet, client-server basics, packet switching, protocols and peer-to-peer networks.

Data Mining, Databases, and Intelligent Decision Support
We will cover business data analysis beginning with some relational database fundamentals and some artificial intelligence technologies used in business data analysis and decision making including expert systems, neural networks, genetic algorithms and intelligent agents.

Social Media, Platforms, and Information Privacy
We will cover the challenges and opportunities in monetizing the social graph, including sources of revenue and sustainable competitive advantage in online social networking. We will introduce the concepts of Internet platform and discuss digital privacy.

Digital Goods, IP, and DRM
We will cover information goods and their unique economics, focusing on costless production, costless distribution, "rendering", and remixing. We introduce the idea of digital rights management and understand how it is central to strategy in the digital economy. We will also discuss IP law, and how it is just one of the forces that regulate digital consumption.

Network Effects
We will cover what network effects are, why they pervade IT-based products and services, and show how they are responsible for Facebook’s future wealth, and for Office and Windows being two of the most profitable products in history.

Web Search, Advertising and the Search Economy
We will cover the history of search, the fundamentals of search technologies and the search economy, including PageRank and its superiority to its predecessors, Google’s business model, and sponsored search advertising. We will also discuss the "long tail" phenomenon and its drivers.

Computer Crime and Security
We will cover some common forms of computer crime enabled by the Internet and what individuals and companies do to protect themselves. We will discuss viruses, denial-of-service and DDOS attacks, encryption and authentication, web defacing, and some common computer security precautions.