Department of Technology Management and Innovation
MG-GY 6933 – Information Technologies, Systems & Management
Fall 2019

Professor:	Dr. William J. Buttigieg
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Office/Hours:	By Appointment 5 MetroTech Center, LC401
Class Schedule:	TBD
Course Pre-requisites:	Graduate Standing

Course Description:

This course is designed for managers who need to understand the role and potential contribution of information technologies in organizations. The focus of the course is on different information technologies and their applications in managing business critical data, information, and knowledge. The course concentrates on the current state of IT in organizations, challenges and strategic use of IT, IT infrastructure and architecture, building, implementing, and managing IT applications, and emerging issues such as intelligent systems, business process reengineering, knowledge management, and group support systems.

The course explores current IT issues such as: 1) using IT as a competitive advantage in large, medium, small and startup firms, 2) IT security and controls, 3) intelligent systems, 4) business process re-engineering, 5) knowledge management, 6) management of internal and external controls of the IT environment, 7) social networks, location based services and impact on business, (Web2.0), 8) group support and collaboration systems, 9) ERP systems, 10) Semantic Web (web 2.0- Web X.0), 11) Hardware/Software infrastructure, 12) Globalization and Outsourcing, 13) Cloud Computing, 14) Big Data and the Quantified Self, 15) Implementation of MIS/IT in organizations.

Course Objective:

Upon completion of the course students are expected to have learned:

- Managerial strategic role of information technology in organizations

- Contributions information technology makes to the organization

- Major issues in information technology management

- Recent advances and current trends in information technology

- The roles people have in implementing and managing MIS/IT

Course Structure:

Team Case Assignments and Presentations

Case	Case Title
1	*How Information Gives You Competitive Advantage* by Michael E. Porter and Victor E. Millar
2	*Information Technology and the Board of Directors* by Richard Nolan and F. Warren McFarlan
3	*The E-Business Revolution* by Peter Weill and Michael R. Vitale
4	*What Every CEO Needs to Know About the Cloud* by Andrew McAfee
5	*Mobile Management Deep Dive* by Galen Gruman http://resources.idgenterprise.com/original/AST-0055393_InfoWorld-MobileManage-DeepDive-Fiberlink.pdf
6	*Big Data: The Management Revolution* by Andrew McAfee and Erik Brynjolfsson
7	*Why IT Fumbles Analytics* by Donald A. Marchand and Joe Peppard
8	*F-Secure Corporation: Software as a Service (SaaS) in the Security Solutions Market* by Robert D. Austin, Kalle Lyytinen, Esko Penttinen, Timo Saarinen, and Lynda M. Applegate
9	*Wyndham International: Fostering High-Touch with High-Tech* by Gabriele Piccoli and Lynda M. Applegate
10	*Jill's Table: Digitizing a Retail Legacy* by Raymond Pirouz and Janice Zolf
11	*Data Scientist: The Sexiest Job of the 21st Century* by Thomas H. Davenport and D.J. Patil
12	*The (Often Hidden) Costs of Poor Data and Information* by Thomas C. Redman
13	*Chapter Four: The Cost of IT* by Robert D. Austin, Richard L. Nolan, and Shannon O'Donnell
14	*Chapter Six: Project Management* by Robert D. Austin, Richard L. Nolan, and Shannon O'Donnell
15	*The Hidden Costs of IT Outsourcing* by Jerome Barthélemy

Team Case Paper and Presentations

Case	Case Title
1	*Managing IT Resources in the Context of a Strategic Redeployment: A Hydro-Québec Case Study* by Alexandre Gilbert, Line Dube, and Real Jacob
2	*CareGroup* by F. Warren McFarlan and Robert D. Austin
3	*Making Better Decisions: Leveraging Your Organization's Data and Information* by Thomas C. Redman
4	*CA Technologies: Bringing the Cloud to Earth* by Marco Iansiti and Kerry Herman
5	*We Gave Them a Tool, but Hardly Anyone's Using It! Untangling the Knowledge Management Dilemma at TPA* by Alina Dulipovici and Ann-Frances Cameron
6	*Creating a Web Site for Medisys Health Group, Inc.* by Michael Parent and Stuart Elman
7	*Digital Ubiquity: How Connections, Sensors, and Data Are Revolutionizing Business* by Marco Iansiti and Karim R. Lakhani
8	*Generating Premium Returns on Your IT Investments* by Peter Weill and Sinan Aral
9	*How Smart, Connected Products Are Transforming Competition* by Michael E. Porter and James E. Heppelmann

Team Assignments

Each student will be randomly assigned to a team. Teams will be assigned during the first session of class. Each team will prepare a Team Charter. Team Charters are due by 09/13/18.

Team One	Team Two	Team Three	Team Four

Team Case Assignments and Presentations:

Each team is assigned two cases from the Team Case Assignments and Presentations section of this document. For this team assignment, each team will create a PowerPoint presentation for each assigned case.

Teams will present PowerPoint presentation in class. Each presentation is 25-30 minutes and everyone on the team presents. Teams will elect a Team Leader/Facilitator. It is suggested that teams have backups to each role.

All team members are expected to contribute equally to each team assignment. PowerPoint presentation must be submitted via NYU Classes. Paper submission will not be accepted. See course grade calculation in this document for percentage value of grade.

Individual Student Midterm Paper:

Students will prepare a research paper (10 pages max) as their Midterm Project instead of a midterm exam. The requirements for Midterm Paper are as follows:

1) Research a problem/issue/failure related to information systems. Examples: ERP implementation failure, issues with an outsourcing strategy, data privacy, information security, computer hacking, internet piracy (intellectual property), big data issues/challenges

2) Find an organization that had this problem/issue/failure. 3) Investigate the organization and the problem/issue/failure.

4) Propose 2 or 3 solutions/recommendations/alternatives on how the organization could have approached and give reasons for choosing.

Midterm papers must be submitted via NYU Classes. Paper submission will not be accepted. See course grade calculation in this document for percentage value of grade. Note: Student midterm paper topics are due on 09/20/18. Note: Student midterm papers are due on 10/18/18.

Participation:

This course utilizes a combination of textbook lectures, case studies, and other relevant reading material such as articles and industry papers. Class interaction is crucial to understanding the concepts, themes, and issues in the area of information technology and information systems.

The course places strong emphasis on class discussion and group interaction. Attendance and active participation are absolutely required. Class participation is evaluated based on informed, logical, and critical input.

Students are expected to read, analyze, and come prepared to discuss the cases assigned in the Team Case Assignments and Presentations section of this document. Each session, an assigned discussant group will present the group's analysis of the case to class. Other students will be randomly selected to present their analysis as well. The presenters are expected to be able to introduce the case and provide a rational logical analysis of the case situation.

See course grade calculation in this document for percentage value of grade.

Team Case Paper and Presentations (Team Peer Evaluations):

Each team will select one of the cases listed in the Team Case Assignments and Presentations section of this document. Selection is based on first come first served basis; therefore, make your case selection quickly. If your first choice is taken, kindly submit another choice.

Teams will select a case that is researched in depth and applied to their current organization (or an existing organization you gain knowledge of through research. For this assignment, each team will create a PowerPoint presentation and a research paper (10 pages max).

Teams will present PowerPoint presentation in class. Each presentation is 25-30 minutes and everyone on the team presents. Each team elects a Team Leader/Facilitator. It is suggested that teams have backups to each role.

All team members are expected to contribute equally to each team assignment.

Each student will submit a team peer evaluation survey where you will rate the performance of each member of your team. The performance ratings will be used as a factor in determining your grade.

PowerPoint presentation and research paper must be submitted via NYU Classes. Paper submission will not be accepted. See course grade calculation in this document for percentage value of grade. Note: Team case choices are due on 09/20/18. Note: Team peer evaluation surveys are due by 12/13/18 (last day of class).

Final Exam:

The final project for this course will consist of an individual student final exam. More guidelines and details on the final exam will be posted on NYU Classes.

See course grade calculation in this document for percentage value of grade.

Case Analysis Guidelines:

A case study analysis requires you to investigate a business problem, examine the alternative solutions, and propose the most effective solution using supporting evidence. Once you have gathered the necessary information, your analysis should include the following sections:

• Cover Page – Include Case Study Title, Student Names, Date of Submission

• Executive Summary - A two paragraph to one page overview of what is contained within. Includes explanation of the   recommendations.

• Introduction – The introduction should include an organization overview and brief summary of the key problems and   issues of the case study.

- Problem Statement - Rank ordered hierarchy of the problems facing the organization. Explain why these are the   problems, why you have rank ordered them as such, and provide some further details about the nature of each   problem.

- Alternatives - Provide a list of possible strategic alternatives the organization can take to solve its problems. Evaluate   each alternative and identify the relative advantages and disadvantages of each alternative.

- Recommendations – Determine and state your choice for the best course of action. Determine if your   recommendation is feasible from a technical, operational, and financial standpoint. Provide an explanation of why   you made this selection and an explanation of why other alternatives were not selected.

- Conclusion – Include a conclusion that summarizes the main points of the paper.

- References – Use a separate page to list the references. Every source mentioned in the paper should have an entry.

Readings:

Required Text(s):

The textbook for purchase: *Management Information Systems: Managing the Digital Firm*, 15th Edition, Hardcover, by Kenneth C. Laudon and Jane P. Laudon (ISBN-13: 9780134639710).

Cases and Case Assignments: To purchase cases go to this URL except where there is a URL listed for the PDF file: *https://hbsp.harvard.edu/import/564897*

Optional Text(s):

Books and Resources:
- *Business Models: A Guide for Business and IT* by Haim Kilov
- *Business Process Models (BPM): The Third Wave* by Howard Smith and Peter Fingar
- *Competing in the Information Age: Align in the Sand* by Jerry N. Luftman
- *Competitive Advantage: Creating and Sustaining Superior Performance* by Michael Porter
- *Diffusion of Innovations* by Everett M. Rogers
- *Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business* by Clayton Christensen

- *Innovator's Solution: Creating and Sustaining Successful Growth* by Clayton Christensen
- *Innovator's DNA: Mastering the Five Skills of Disruptive Innovators* by Clayton Christensen
- *Managing for the Future: Organizational Behavior and Processes* by Deborah G. Ancona, Thomas A. Kochan,   Maureen Scully, John Van Maanen, D. Eleanor Westney
- *Offshore Outsourcing: Path to New Efficiencies in IT and Business Processes* by Nandu Thondavadi and George Albert
- *Project Estimating and Cost Management* by Parviz F. Rad
- *The Four Steps to the Epiphany: Successful Strategies for Products that Win* by Steven Gary Blank   Websites:
- Application Development Trends: www.adtmag.com
- Bankers Online: www.bankersonline.com/technology/technology.html
- CIO Magazine: www.cio.com
- ComputerUser: www.computeruser.com
- Computerworld: www.computerworld.com
- Gartner: www.gartner.com
- InfoWorld: www.infoworld.com
- Information Week: www.informationweek.com
- International Data Corporation (IDC): www.idc.com
- ITbriefing.net: www.itbriefing.net
- New York Times - Technology: www.nytimes.com/section/technology
- New York Times - Technology Bits: www.nytimes.com/column/bits
    - SD Times: www.sdtimes.com
    - Techmeme: www.techmeme.com
    - Wall Street Journal – Tech News and Analysis: www.wsj.com/news/technology
    - Wall Street Journal - CIO Journal: www.wsj.com/news/cio-journal
    - Wired – www.wired.com

<u>Course Assignments and Grading</u>:

Course Grade Scale:

Points	Grade	Performance
95 – 100	A	Excellent
90 – 94	A-	Very Good
87 – 89	B+	Average
83 – 86	B	Average
80 – 82	B-	Average
77 – 79	C+	Below Average
73 – 76	C	Below Average
70 - 72	C-	Below Average
0 – 69	F	Failed to Earn Credit

Course Grade Evaluation:

Activity	Percentage of Grade
Team Case Assignments and Presentations	20%
Individual Student Midterm Paper	20%
Participation	20%
Team Case Research Paper and Presentations (Team Peer Evaluations)	20%
Final Exam	20%
Total Points	**100%**

Standards for Written Work:

Depth of Scholarship: Assignments should represent the student's careful, thoughtful efforts to cover the key elements of the topic thoroughly. Content should go beyond mere description or paraphrasing.

Originality of Ideas and Research: Assignments should demonstrate a unique, creative approach to

the problem being studied and represent the original work of the student.

Theoretical and Conceptual Framework: Assignments should display the student's understanding of the theories and concepts relevant to the topic. Students should form their arguments by taking competing concepts and theories into account.

Use of Literature: Assignments should be grounded in appropriate, adequate, and timely academic literature. No specific number of sources is prescribed, but those used should represent the best available references on the topic.

Substantive Value: Assignments should contribute substantive value to the understanding of the subject.

Clarity and Logic of Presentation: Assignments should present ideas in a clear manner and with a strong organizational structure. Coverage of facts, arguments, and conclusions should be logically related and consistent.

Grammar and Formatting: The rules governing the grammar and usage of standard American English should be followed, and language should be clear, precise, and appropriate. When formatting and composing assignments, including citations and reference pages, students should adhere to APA style. For APA style, follow the guidelines described in the *Publication Manual of the American Psychological Association*, 6th Edition by the American Psychological Association.

Grading Scale for Written Work

Criteria	Weighting
Depth of scholarship	10%
Originality of ideas and research	15%
Theoretical and conceptual framework	15%
Use of literature	15%
Substantive value	15%
Clarity and logic of presentation	10%
Grammar and adherence to APA format	20%
Total	100%

- Academic Honesty: Academic Honesty is highly valued at NYU. Students are expected to know and comply with NYU provisions on academic honesty, consequences of academic dishonesty. Plagiarism is not tolerated. Faculty uses NYU-Classes Turnitin to determine

how much of your paper appears in publications, websites, or student papers including those you submitted in other courses. Plagiarism is a sure way to fail the course. All work of others must be properly cited as well as work you have submitted in other courses. Each student is responsible for all that he or she submits.   Assignments: Students are expected to commit substantial time and effort by attending classes and conducting research to complete assignments. Assignments are due on the date specified in this. Late assignments affect the grade. Students are expected to check NYU-Classes daily for any announced changes in scheduled class/lab meetings and/or assignments.   Attendance: Students are expected to attend all classes. Repeated absences may negatively affect the grade. Students with excessive unexcused absences may be referred to the department advisor or to Student Services. If you miss a class, contact Student Services immediately and obtain a valid note to the instructor for your absence to be excused.

Course Topic Outline

Session	Date	Topics	Chapters	Cases/Assignments
1	09/06/18	Course introduction. Review syllabus, team assignments, and team project. Information Systems in Global Business Today Global E-Business and Collaboration Information Systems, Organizations, and Strategy	1, 2, 3	Teams assigned during Session 1 Team Charters due by 09/13/18 Case #1: Everyone Case #2: Everyone Case #3: Everyone
2	09/20/18	Ethical and Social Issues in Information Systems IT Infrastructure and Emerging Technologies	4, 5	Individual Student Midterm Paper Topics Due Team Case Choice Due Case #4: Team One Presentation Case #5: Team Two Presentation
3	10/04/18	Foundations of Business Intelligence: Databases and Information Management Telecommunications, Internet and Wireless Technology	6, 7	Case #6: Team Three Presentation Case #7: Team Four Presentation
4	10/18/18	Securing Information Systems Operational Excellence and Customer Intimacy: Enterprise Applications	8, 9	Individual Student Midterm Paper Due Case #8: Everyone Case #9: Everyone
5	11/1/18	E-Commerce: Digital Markets, Digital Goods Managing Knowledge	10, 11	Case #10: Team One Presentation Case #11: Team Two Presentation
6	11/15/18	Enhancing Decision Making Building Information Systems	12, 13	Case #12: Team Three Presentation Case #13: Team Four Presentation
7	11/29/18	Managing Projects Managing Global Systems Final Project Presentations	14, 15	Case #14: Everyone Case #15: Everyone Team Papers PowerPoint Presentations Due Team One Presentation Team Two Presentation Team Three Presentation Team Four Presentation
8	12/13/18	Final Exam		Final Exam Team Peer Evaluation Surveys Due

Academic Integrity:

All students are responsible for understanding and complying with the NYU Statement on Academic Integrity.

Academic Integrity for Students at NYU

This policy sets forth core principles and standards with respect to academic integrity for students at New York University. Each school at New York University may establish its own detailed supplemental guidelines for academic integrity, consistent with its own culture, and consistent with the University-wide general guidelines described in this document.

At NYU, a commitment to excellence, fairness, honesty, and respect within and outside the classroom is essential to maintaining the integrity of our community. By accepting membership in this community, students take responsibility for demonstrating these values in their own conduct and for recognizing and supporting these values in others. In turn, these values will create a campus climate that encourages the free exchange of ideas, promotes scholarly excellence through active and creative thought, and allows community members to achieve and be recognized for achieving their highest potential.

In pursuing these goals, NYU expects and requires its students to adhere to the highest standards of scholarship, research and academic conduct. Essential to the process of teaching and learning is the periodic assessment of students' academic progress through measures such as papers, examinations, presentations, and other projects. Academic dishonesty compromises the validity of these assessments as well as the relationship of trust within the community. Students who engage in such behavior will be subject to review and the possible imposition of penalties in accordance with the standards, practices, and procedures of NYU and its colleges and schools. Violations may result in failure on a particular assignment, failure in a course, suspension or expulsion from the University, or other penalties.

Faculty are expected to guide students in understanding other people's ideas, in developing and clarifying their own thinking, and in using and conscientiously acknowledging resources - an increasingly complex endeavor given the current environment of widely available and continually emerging electronic resources. In addition, students come to NYU from diverse educational contexts and may have understandings regarding academic expectations that differ from those at NYU. NYU values and respects all academic traditions; however, while at NYU, students are expected to adhere to the norms and standards of academic integrity espoused by the NYU community and will be assessed in accordance with these standards. Students should ask their professors for guidance regarding these standards as well as style guide preferences for citation of sources for assignments in their courses.

Following are examples of behaviors that compromise the academic and intellectual community of NYU. The list is not exhaustive. Students should consult the websites and guidelines of their individual schools for an extended list of examples and for further clarification.

1. Plagiarism: presenting others' work without adequate acknowledgement of its source, as though it were one's own. Plagiarism is a form of fraud. We all stand on the shoulders of others, and we must give credit to the creators of the works that we incorporate into products that we call our own. Some examples of plagiarism:
    a sequence of words incorporated without quotation marks
    an unacknowledged passage paraphrased from another's work

- the use of ideas, sound recordings, computer data or images created by others as though it were one's own

2. Cheating: deceiving a faculty member or other individual who assess student performance into believing that one's mastery of a subject or discipline is greater than it is by a range of dishonest methods, including but not limited to:

    bringing or accessing unauthorized materials during an examination (e.g., notes, books, or other information accessed via cell phones, computers, other technology or any other means)

    providing assistance to acts of academic misconduct/dishonesty (e.g., sharing copies of exams via cell phones, computers, other technology or any other means, allowing others to copy answers on an exam)

    submitting the same or substantially similar work in multiple courses, either in the same semester or in a different semester, without the express approval of all instructors

    submitting work (papers, homework assignments, computer programs, experimental results, artwork, etc.) that was created by another, substantially or in whole, as one's own

    submitting answers on an exam that were obtained from the work of another person or providing answers or assistance to others during an exam when not explicitly permitted by the instructor

    submitting evaluations of group members' work for an assigned group project which misrepresent the work that was performed by another group member

    altering or forging academic documents, including but not limited to admissions materials, academic records, grade reports, add/drop forms, course registration forms, etc.

3. Any behavior that violates the academic policies set forth by the student's NYU School, department, or division.

Moses Center Statement of Disability

If you are student with a disability who is requesting accommodations, please contact New York University's Moses Center for Students with Disabilities at 212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at www.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 2nd floor.