MIS 555: Management of Information Technology

Syllabus

Instructor: Joe Gatto
Office: DPC 6001
Office Hours: By Appointment in DPC
Email: jgatto@fsgconsulting.com

"Learning rarely, if ever, occurs passively."

“The challenge is not the technology. The challenge, as always, is culture — changing our entrenched ways of thinking, acting and organizing.” Virginia M. Rometty, IBM chairwoman, president, and CEO, 2013.

Course Objectives

• Explore and debate critical issues related to managing and administering the information technology (IT) function.
• Explore the CEO perspective of aligning IT with business strategy.
• Investigate the overall information needs of an organization and the role of IT in providing them.
• Examine alternative ways to match the IT function to the structure and behavior of the organization.
• Consider some of the ethical and societal, as well as organizational implications and effects of IT.

Behavioral Objectives

Upon completing this course the students should:
1. have a business view of governing the investment in IT
2. understand the challenges of maintaining IT alignment with the business
3. be prepared to manage IT in their areas of responsibility
4. be prepared to cope with technology-driven change
5. be able to identify ways to use IT in their areas of responsibility
6. be able to guide the development or purchase of information systems
7. be able to choose among different ways to procure an information system
8. be able to identify potential strategic application of IT
9. be prepared to contribute to the development of a strategic plan for IT
10. understand the need for an organizational IT infrastructure
11. be able to evaluate the effectiveness of the information systems organization and to use this organization effectively
12. have a vision of the future impact of IT on managers, organizations, economy, and society
13. be aware of some of the ethical and societal considerations in the development and use of IT

Course Approach

Learning by discussion is both an effective and exciting pedagogical experience. This process requires active involvement of all participants, in this case students and instructor, although the instructor’s function is primarily that of a catalyst, facilitator and evaluator in a collaborative learning experience. It is therefore essential that everyone participate as fully as possible. The framework for this participation will include case analyses, textbook assignments, and presentations, all designed to help convey the main body of knowledge and to stimulate the desired critical thinking. The most effective learning will result from your involvement in critical thinking through class presentation and discussion as well as through your homework assignments.
Materials

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Study Habits
Careful and timely reading and study is critical to the success in this course. Text and case readings will precede coverage of the material in class to facilitate your active participation in class discussions.

In class, the instructor will highlight specific areas only, answer your questions on the covered material, and then ask you questions. This will stimulate discussion. Do not expect full-coverage lectures. Make notes while reading the assignments. You can then highlight material as appropriate during the class coverage.

You will find it difficult to complete the assignments effectively the night before class. Space the readings over the whole week. Work ahead and make sure to prepare for classes ahead of time and take quizzes before the start of each class. You must brief the assigned case prior to coming class in order to fully participate in the case discussions during class.

Academic Honesty
Academic dishonesty is a serious offense and will not be tolerated. Any student found cheating will receive a grade of "F" for the course and will be subject to disciplinary action under DePaul University regulations. Please review the Academic Integrity Policy.

We thought this reminder was unnecessary, but have recently stumbled on several cases of plagiarism. Please be aware that any written work submitted in this course may be verified using *Turn-It-In* technology in order to ensure that the work is the student's own creation and not in violation of the University's Academic Integrity Policy. Submission of work in this course constitutes a pledge that the work is original and consent to have the work submitted to verify that fact. Academic dishonesty is a serious offense and will not be tolerated. Any student found cheating on quizzes, homework or presentation will receive a grade of "F" for the course and will be subject to disciplinary action under DePaul University regulations. Please review the DePaul University Student Handbook. Students are expected to be familiar with the SOA & MIS Code of Conduct.

Miscellaneous
You are encouraged to be "entrepreneurial" in your approach to the class presentation and interactions. Your observations or experiences, and how they might relate to the subject at hand, have the potential to enhance the class sessions. Please share those of value so that you may be a resource to all participants, including the instructor. You are also encouraged to employ the systems perspective and wear the "manager's hat" in relating to the issues so that you will be able to think about them critically from multiple dimensions.
STUDENTS ARE EXPECTED TO HAVE READ Chapter 1 and BRIEFED THE Mid-South Chamber of Commerce (A) CASE PRIOR TO OUR FIRST CLASS.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading Assignment / Case Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 9/14/15</td>
<td>Course Introduction: Discussion of Current Topics in IT Managing IT in a Digital World</td>
<td>Chapter 1 / Case I – Mid-south</td>
</tr>
</tbody>
</table>
| Week 2 9/21/15 | Computer Systems (Hardware/Software) Telecommunications and Networking The Data Resource | Chapter 2  
Chapter 3 – Quiz 1  
Chapter 4 - Quiz 2  
Case I-1, IMT Custom Machine Company |
| Week 3 9/28/15 | Enterprise Systems Managerial Support Systems | Chapter 5 – Quiz 3  
Chapter 6 – Quiz 4  
Case I-4, Mobile Health Clinics |
| Week 4 10/5/15 | E-Business Systems Basic System Concepts | Chapter 7 – Quiz 5  
Chapter 8 – Quiz 6  
Case I-5 Data Governance  
Case II –2 BI at Continental Airlines |
| Week 5 10/12/15 | Methodologies for Custom Software Development / Purchased Software Packages | Chapter 9 – Quiz 7  
Chapter 10 – Quiz 8  
Case III – 2 Make/Buy at Baxter Mfg  
Case III – 5 NIBCO’s SAP |
| Week 6 10/19/15 | IT Project Management | Chapter 11 – Quiz 9  
Case III – 7 Modern Materials, Inc.  
Case III – 8 Jefferson County Schools |
| Week 7 10/26/15 | Planning Information Systems Resources | Chapter 12 – Quiz 10  
Case IV- 1 Clarion School for boys |
| Week 8 11/2/15 | Leading the IS Function | Chapter 13 – Quiz 11  
Case IV – 3 Schaffer (A) Outsourcing  
Case IV – 4 Schaffer (B) Contract |
| Week 9 11/9/15 | Information Security | Chapter 14 – Quiz 12  
Handout – Disaster Recovery Planning |
| Week 10 11/16/15 | Social, Ethical, and Legal Issues | Chapter 15 – No Quiz  
Case IV – 8 Mary Morrison |
Homework Assignments

Assignments, all due before the start of sessions, will consist of:

1. Readings from the text and the selection of cases (see Course Schedule).
2. Quizzes covering the readings.
3. Written assignments:
   - D2L Discussion Board postings of New Development in Information Technology – four postings over alternating weeks.

All of these assignments are further explained below. Please note that quizzes exclude the embedded cases in our textbook.

Evaluation of Students

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in class discussion</td>
<td>30%</td>
<td>300</td>
</tr>
<tr>
<td>Quizzes</td>
<td>30%</td>
<td>300</td>
</tr>
<tr>
<td>Technology Impact Presentation</td>
<td>20%</td>
<td>200</td>
</tr>
<tr>
<td>New Developments in IT</td>
<td>20%</td>
<td>200</td>
</tr>
</tbody>
</table>

There will be no midterm or final examination.

Letter Grade Determination

The following table will be used in converting numeric grades into an official letter grade for the course:

<table>
<thead>
<tr>
<th>Number Scale</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 – 930</td>
<td>A</td>
</tr>
<tr>
<td>929 – 900</td>
<td>A-</td>
</tr>
<tr>
<td>899 – 870</td>
<td>B+</td>
</tr>
<tr>
<td>869 - 830</td>
<td>B</td>
</tr>
<tr>
<td>829 – 800</td>
<td>B-</td>
</tr>
<tr>
<td>799 – 770</td>
<td>C+</td>
</tr>
<tr>
<td>769 – 730</td>
<td>C</td>
</tr>
<tr>
<td>729 – 700</td>
<td>C-</td>
</tr>
<tr>
<td>699 – 670</td>
<td>D+</td>
</tr>
<tr>
<td>669 – 600</td>
<td>D</td>
</tr>
<tr>
<td>599 – 0</td>
<td>F</td>
</tr>
</tbody>
</table>
Participation in Class Discussion

Significant weighting is allocated to class participation. Student engagement in discussions and participation in question and answer sessions is a critical component of being successful in this course. Throughout the term, each student's participation will be continuously evaluated and, if requested, suggestions of how to improve it will be offered. Of course, this will be on an individual basis. Class participation is a subjective evaluation of each student’s contribution to the unstructured discussion of the reading assignments, questions and business cases. The evaluation will consider both the quality of contributions and the frequency of participation. Completion of reading assignments and preparation of the cases is essential for full participation. The grade will be prorated as follows:

- **4** Asks good questions, makes valuable observations, and answers questions effectively on an ongoing basis.
- **3** A frequent participant, but all questions, answers, or observations are not always effective, or not on an ongoing basis, or tends to discourage effectiveness.
- **2** Only participates infrequently, or questions/answers do not reflect adequate preparation, or late to class.
- **1** Very rare participation, or questions/answers reflect little or no preparation, or very late to class.
- **0** Displays no sign of life, or absent for entire class.

As can be seen, you are expected to attend classes and participate. Not attending a class will have an influence on this portion of your grade since you cannot participate if you are not in class. **More than two unexcused absences will result in a failing grade.**

Quizzes

The quizzes will be available online on D2L and should be taken before the start of each class starting in the second week. They will be based on the readings assigned for each individual class and will be in true/false and multiple choice formats. The quizzes will cover the content from the textbook chapters (excluding the imbedded case studies) assigned for each particular class. Quizzes will be scheduled for Chapters 3 through 14. Note that some weeks will require two quizzes while others will require one quiz. Refer to the course schedule for specific assignments. I recommend that in weeks where two quizzes are assigned that you prepare and take the first quiz and then prepare and take the second quiz. Each quiz will have 25 questions which will be picked at random for each quiz session. You will have 25 minutes to respond to 25 multiple-choice or true/false questions. When the “Time Left” display changes from “1 minute” to “<1 minute,” you are within the last 60 seconds of the allowed time and should submit the responses quickly because the quiz window will automatically close at the 25 minute mark. Each correct answer is scored as one point.

Please note that the quiz will not be automatically submitted when the 25 minutes expire so you will need to click on the “Go To Submit Quiz” button in the bottom right corner after saving your responses and then submit it. Failure to submit your quiz within the allocated time may result in a score of zero for the quiz session.

Case Study Analysis

**Preparation**

Read the case through once to become familiar with the background, the people involved, the situation, the problems and opportunities, etc. Do not bother taking notes during this first reading.

Read the case again, this time studying it for details. This is the time to make notes. During this or a subsequent reading, formulate your ideas relative to the case situation.

Note: Cases should be properly briefed prior to class – there will not be time to brief the cases during class.
In class

In class we will analyze the background and environment of the case, discuss the problem(s) and alternatives, the pros and cons of the suggested alternatives, and recommended solutions. This will be done in both group and open class discussion.

New Developments in Information Technology

Information technology, its applications, impact and related public policy is fast moving and ever changing. In order to keep up to date, it is necessary to follow technology news as reported on a day-to-day basis. There are many excellent sources of current news about technology and technology issues. They include, but are not limited to, The Wall Street Journal, The New York Times, Business Week, CIO, Information Week, and Computerworld, all widely available in the libraries and on the Internet. Alternatively, you may select an article from a journal, which covers technology and technology issues, such as Sloan Management Review, MIS Quarterly etc. and certainly from any of the other relevant journals, magazines, and respected blogs.

During the course, you are expected to read or scan one or more of these publications and every other week select an article about something that in your opinion is a particularly significant event or announcement of a new development in IT. You should write two separate sections subtitled Summary and Analysis, together not exceeding one page in length. As the name suggests, the first should summarize the source. The second should describe both its potential business impact and why you consider it so significant. You must post it as an attached file inside the appropriate folder in D2L. You should also provide a complete reference to the source or a hyperlink when the source is available on the Web. Bring a hard copy of your posting with you to class. You should be prepared to present your choice in class (visual aids not required) and lead a discussion of it. The grade will be based on the quality of analysis, on the significance, and on the potential impact of the chosen news item.

As a general rule, students with even student numbers should post their write-ups for weeks 2, 4, 6, 8. Students with odd student numbers should post their work for weeks 3, 5, 7, 9.

Technology Impact Presentation

It is assumed that you have read the assigned materials from the textbook. A lecture or presentation covering the same material would therefore be superfluous. What is important and interesting is how these concepts relate to your work environment, i.e., what "impact" they might have on your professional occupation. In a group such as this, a wide variety of organizational types and job functions are inevitably represented. Therefore, we can assume the existence of a variety of experiences and observations, which have the potential to enhance our knowledge and understanding. Although you are encouraged to contribute your observations whenever appropriate during class discussion, it is important to insure that everyone has an opportunity to describe in some detail how the concepts covered in class might relate to a work environment.

Therefore, each week several students will be assigned to present to the class experiences of their own or of which they know relating to the application of the concepts covered in the course. If you have no relevant work experience, you may research ways in which the concepts have been implemented either in the literature or by interviewing someone in your own or another organization.

This presentation should not reiterate what is in the assigned material, but should be designed to add value by expanding the horizon. For instance, one chapter discusses system development tools and methodologies. If your organization implemented an Enterprise Resource Planning (ERP) system, for example, a description of why it was decided to do so, how it was implemented, and what were the results would add significantly to our understanding of the applicability of such technology.

Textbooks are time-sensitive, especially in the field of IT. Some aspects are already out of date when the book is published. We must depend on literature, both popular and technical, to update the material. Therefore, part of your presentation might indicate any recent developments of which you are aware. If you feel that the new developments are significant enough to warrant devoting your entire presentation to
them, please see or email me for approval. Prior to presenting to the class, post your presentation to the appropriate folder in D2L.

Your presentation will be limited to ten minutes and you must employ visual support (e.g., PowerPoint presentation). Any other audio-visual material, which may be appropriate, may also be utilized. You should be prepared to conduct a class discussion after you present, which is limited to five minutes.

**Notes:**

- The presentation must be done in a professional manner as if you were making a presentation to top management (but you are not expected to dress up for the occasion).
- You must employ “professional” visuals. The PowerPoint presentation technology and Internet access will be available in class.

**Feedback**

After your presentation, you will receive written feedback and a grade on the form shown on the last page. Students with experience in business presentations have an advantage and normally do better, because of their improved communication skills. Even so, it has been my experience that two communication skills – the eye contact and the use of hands – are often a challenge. Please try to refer to the monitor or screen very sparingly by memorizing the presentation. This way, you will be able to keep a virtually continuous eye contact with the audience. You will also not need to hold notes, which will free your hands, so you can use them to stress important points. Please do not lean on the lectern, lock your hands in front of you, or stuff them into pockets. Just release them straight down when you do not use them to enhance your message.
Kellstadt Graduate School of Business
MIS555 - Management of Information Technology
Technology Impact Presentation Feedback

Student Name ____________________________________________ Date _____________

Subject of Presentation _______________________________________________________

Content
   Clear explanation of the main message or focus (2):
   Topic related to concepts in text (2):
   Presented a message (2):
   Added value (2):

Visual aids
   Visible to audience (1):
   Reinforced messages (1):
   Overall effectiveness (2):

Communication skills
   Vocal energy, volume, inflection (1):
   Eye contact (1):
   Body energy, stance, and use of hands (1):
   Enthusiasm (1):

Handling of Q & A (2):

Control of time (2):

Suggestions for improvement:

Total Points out of 20 _________
How to Analyze a case

What is a case?
A case is a description of a business situation faced by an organization. It typically includes information regarding the organization’s history, management team, operating processes, competitive environment and financial data.

Why we use cases as a method of instruction.
Analyzing a case provides practice both in diagnosing an organization’s situation and in formulating action plans to improve that situation. Part of what makes case analysis somewhat frustrating and difficult is also what makes it so valuable.
• The issue is not stated in the case. It is up to the reader to determine the issues.
• Cases have no unique answer. The background and experiences of the reader will often lead to one of a number of viable solutions. Cases rarely have only one solution.
• Information provided within the case is incomplete, misleading or extraneous. The reader must ascertain what information is of value.
The above characteristics of case analysis are also characteristics of real world business decision making. Analyzing a case gives the reader the chance to practice such decision making within a learning environment.

How should a case be analyzed?
• First, read the case quickly. Try to get a sense of the big picture rather than immediately focusing on details. Now you should be able to diagnose the problem area, whether it be marketing, information technology, finance or a combination of areas.
• Second, read the case again. This time focusing on specific, relevant facts that support your diagnosis of the problem area. Make use of both qualitative and quantitative information, particularly information that is included within the exhibits.
• Third, state the problem in clear, concise terms. Be careful not to confuse symptoms of the problem with the actual problem.
• Next, generate solutions to the problem as you have stated it. Some solutions may be included in the case write-up. Other solutions may be based on your own experiences. Other solutions may incorporate principles taught during class.
• Next, evaluate the alternative solutions in terms of how well they achieve a solution to the organization’s problem as you have defined it. Select the best alternative.
• Next, consider the implementation of your solution and possible problems it may cause. Plan the steps involved to insure a trouble free implementation.
• Last, be prepared to defend your solution and its implementation as the best possible choice.
Finally, remember that case analysis is as much an art rather than a science. There are no prescribed solutions.