MIS 330 – System Analysis and Design (Fall 2012)

Section 002, Innovation Hall 209, Mon 7:20pm – 10:00pm

Instructor: Shun Ye
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Office: Enterprise Hall 138
Office Hours: Mon 5:30pm-7:00pm, Wed 5:30pm-7:00pm, and by appointment
Phone: 240-281-7044 (email is better, I do not check voicemails every day)
Course website: http://mymason.gmu.edu (MIS-330-002-Fall2012)

Prerequisites
Grade of 'C' or higher in MIS 310 (Database Management Systems)

Course Description
Nowadays information systems (IS) are playing a critical role in the operations of every business. To optimize business success, firms and organizations must ensure that information systems are designed, developed and implemented properly. This entails that IS professionals must bear a unique combination of business knowledge, technical skills, and understanding of the organizational context in order to develop effective information systems. Likewise, non-IS professionals must be able to understand how to contribute to the systems analysis and design (SA&D) process to support their functional areas. The objective of this course is to help students gain a solid foundation in the concepts, processes, and challenges in designing and managing modern systems and applications. Students will also develop skills in using modern SA&D methodologies/techniques and tools which can be applied to real life projects.

Course Goal
Upon successful completion of this course, students will:

- Understand the systems analysis and design process
- Identify and model basic business processes and requirements
- Design database structures based on business requirements
- Conceptualize and design basic user interfaces for communicating with systems
- Identify necessary stages and tools of software development for a given system design
- Plan implementation and support strategies for a given system
• Take part and satisfactorily perform in a systems analysis and design project team in a real world setting.

Course Materials

This course will use Blackboard to deliver course materials such as lecture notes, announcements, online discussions, and assignments. Additional materials beyond the textbook may also be posted on the Blackboard. It is important for you to visit the blackboard site http://mymason.gmu.edu (MIS-330-002-Fall2012) regularly for course materials and announcements. Specific assignments and due dates will also be posted on Blackboard.

Course Format
The course consists of a combination of lectures, discussions, and hands-on practice sessions. Please see the attached course outline for a tentative list of topics. There will be both individual and team assignments.

Computers and Software Used in the Class
PC versions of both Microsoft Project and Microsoft Visio 2010 will be used in this class. The software may run only on a computer with the appropriate Microsoft Windows operating system. During this class, we are unable to provide advice and support for the use of Macintosh computers and other versions of this software. It is your responsibility to make sure your assignments meet the required PC standards.

During the first week of the semester you should receive an email from the School of Management providing you with instructions for downloading the software through the DreamSpark Premium (formally Microsoft Developers Network Academic Alliance (MSDNAA)).

You are required to bring a laptop to the class sessions involving software (tentatively Session 4 on Sep 24 and Session 8 on Oct 22).

Grading, Assignments, and Policies:
Quizzes (4) 10% (individual effort)
Assignments (2) 10% (individual effort)
Group Project 20% (group effort)
Mid Term Exam 20% (individual effort)
Final Exam 25% (individual effort)
Participation & Professionalism 15% (individual effort)
Total 100%
Possible Extra Credit 2%
Quizzes (10%): There will be 4 short review quizzes given to ensure proper understanding of the class material. Each will be worth 2.5% of your final course grade. Quizzes are individual activities, and are closed book and closed notes. Typically, a quiz is 8-10 multiple-choice questions, although other question formats may sometimes be used. Additional information on the quizzes (e.g., topic coverage) will be provided as we approach the quiz dates. The quizzes will be given at the start of the class on the dates designated on the course schedule.

Assignments (10%): There will be 2 technical assignments related to Microsoft Project and Visio. Each will be worth 5% of your final course grade. These assignments are intended to provide you with the opportunity to experience and practice tools/techniques/approaches of the SA&D process. These will be individual efforts. Specific requirements for each assignment will be announced in class and posted to Blackboard. Assignments should normally be submitted through Blackboard, unless otherwise specified by the requirements.

Group Project (20%): This is a team assignment, requiring the students to form teams of 3-4 people. The purpose of this assignment is for students to analyze and design a system that your group chooses in the proposal. Students are encouraged to go beyond existing systems and technologies and create new systems or re-invent old systems that are expected to have important impacts in the next five to ten years. Students will have the opportunity to form their own teams, and any students not in a team after Sep 4 7:20pm will be randomly assigned to one. Each team will have to select a team leader. To form your own group, have your team leader email me the names of your group members (the subject line should start with “MIS330”). The projects should progress in parallel with the topical areas of the lectures and assignments. On Oct 8, each team should submit a one-page proposal or outline to describe the project.

Your team will be asked to submit a written report and present the report to the class. Each report should include a unifying vision for the description of the system, why the system is important, and various design features of the service (data, process, interface, etc.). Detailed requirements of the written report will be posted to Blackboard by Sep 3. Briefing presentations will be given in the last session. Your written report should be 4-6 pages, in 12 point times font, double-spaced, with one-inch margins (excluding tables and figures). You are encouraged to use bullet points that help you organize and present your thoughts. Your team leader will be responsible for submitting the written report. After the group project, teams will complete peer evaluations. Individual grades may be adjusted up or down from the group grade based on peer evaluations.

Tests (45%): There will be 2 tests. The mid-term exam will cover the first half of the semester and it will be held during regular class time. It will be worth 20% of your final course grade. The final exam will be worth 25% of your final course grade, and it will be cumulative.

Participation and Professionalism (15%): All students are expected to participate in discussions and case studies both in the classroom (10%) and online (5%). Starting from the second week, a discussion question will be posted on the discussion board of Blackboard. There will be 11 discussion questions in total and every student is expected to contribute to at least 5 of them in order to receive full credit for online participation (5% of the final course grade). Classroom participation counts for 10% of the final course grade. I recognize that not all students are equally comfortable with participating in class; however, this is a relatively low risk environment in which to practice skills that you will need later in life. The class participation
policy is simple: if you make an effort to participate in class regularly and exhibit professionalism, you will get full credit.

This is a business school: all students should conduct themselves in a professional manner. This includes factors such as coming to class on time every day, making sure not to disrupt the learning environment (e.g., by leaving early, forgetting to vibrate your cell phone, etc), being prepared and participating in the class by asking and answering questions thoughtfully, being respectful of others in the classroom, and handling all course-related communication in a professional manner. Engaging in activities that are unrelated to the class (such as surfing the web) shows a lack of professionalism and may affect your participation grade.

Possible Extra Credit (2%): There might be an opportunity provided at some point during the semester for you to get 2% extra credit on your final course grade. If such an opportunity arises, you will be provided with specific information. There is no guarantee of extra credit opportunity, and please do not ask for it.

Evaluation

All assignments are due at the beginning of class on the due date. See Blackboard for specific assignments and due dates. Assignments should normally be submitted through Blackboard, unless otherwise specified by the requirements. The written assignments should be typed in 12 point font size, double-spaced, with one-inch margins, except for the technical assignments.

A Note Regarding LATE assignments:
Late assignment will NOT be accepted if we are discussing the assignment in class on the due date. Otherwise, a 10% penalty will be deducted for each day it is late. Submissions are expected to be completed before class, thus assignments turned in after class begins will be treated as late. Please prepare in advance so that you will not encounter technical difficulties that will result in your work not being accepted. If you cannot attend class on the day an assignment is due, please make prior arrangements with me or turn in the assignment a few hours (or a day) early.

If you have a question about your grade on an assignment or you believe that you were graded incorrectly, please submit a formal request describing the situation and the reasons that justify your request for re-grading. In this case, I will re-grade the assignment, and the grade may go up or down. This grade will be final. Students have one week from the date an assignment or test is returned to submit a written request for re-grading. After one week, no changes will be considered.

The grade distribution for this course is not fixed. Grading is based on rank order performance relative to your peers, and the cutoffs for the letter grades will vary depending on how the class as a whole performs.
Missed Exams and Quizzes
Barring unusual circumstances, no exceptions will be made for absence from exams and quizzes. In case of absence, adequate proof needs to be provided to justify the absence. The decision regarding a make-up exam/quiz will be at the sole discretion of mine. Missed exams/quizzes will be assigned a score of 0 (zero).

Communications
All students must use their MasonLive email account to receive messages related to this class. I will address all of my e-mails and replies ONLY to your @gmu.edu e-mail address for concerns of privacy and confidentiality. If you use another e-mail account as your primary e-mail, please be sure to forward your gmu e-mail to that account.

Inclement Weather and Other Emergencies
Class will be cancelled when the campus is closed, either due to inclement weather or other situations. You will be notified by e-mail if class is cancelled in other situations. Please make sure your email address is correct. To ensure the progress of the class, I ask that you check the Blackboard announcements regularly, since announcements will be made regarding whether make-up sessions are necessary, as well as the changes to deadlines.

Disability Accommodations
If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact me and the Office of Disability Services (ODS) at 993-2474 (http://ods.gmu.edu) as early as possible in the term, but not later than the second week of the class. All academic accommodations must be arranged through the ODS.

Academic Integrity
George Mason University has a clearly described University Honor Code administered by the Office for Academic Integrity. This Code sets standards for academic integrity at GMU for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the University Honor Code or the Office for Academic Integrity, please visit http://honorcode.gmu.edu.

To further exhibit your commitment to academic integrity, you are asked to sign the Honor Pledge on all examinations and assignments: "I pledge on my honor that I have not given or received any unauthorized assistance on this examination (assignment)."
# Tentative Class Outline

<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Topics</th>
<th>Readings</th>
<th>Deliverables</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Aug 27</td>
<td>Course Introduction</td>
<td>None</td>
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<tr>
<td></td>
<td>Sep 3</td>
<td>Labor day</td>
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<td>Group formation due on Sep 4 7:20pm</td>
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<td>2</td>
<td>Sep 10</td>
<td>The Systems Development Environment</td>
<td>Chapter 1</td>
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<td>3</td>
<td>Sep 17</td>
<td>Software Origins</td>
<td>Chapter 2</td>
<td>Quiz 1</td>
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<td>4</td>
<td>Sep 24</td>
<td>Project Management (Bring your laptop)</td>
<td>Chapter 3</td>
<td>Microsoft project assignment due</td>
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<td>Tutorial: Using Microsoft Project</td>
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<td>5</td>
<td>Oct 1</td>
<td>Planning</td>
<td>Chapter 4 &amp; 5</td>
<td>Mid-term exam</td>
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<td>6</td>
<td>Oct 9</td>
<td>Determining Requirements/Review for Mid-term</td>
<td>Chapter 6</td>
<td>Quiz 2/ One-page team project proposal or outline due</td>
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<td>7</td>
<td>Oct 15</td>
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<td>8</td>
<td>Oct 22</td>
<td>Modeling Process (Bring your laptop)</td>
<td>Chapter 7</td>
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<td>Tutorial: Using Microsoft Visio</td>
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<td>9</td>
<td>Oct 29</td>
<td>Modeling Data</td>
<td>Chapter 8</td>
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<td>10</td>
<td>Nov 5</td>
<td>Designing Databases</td>
<td>Chapter 9</td>
<td>Visio assignment due</td>
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<td>11</td>
<td>Nov 12</td>
<td>Designing Interfaces</td>
<td>Chapter 10 &amp; 11</td>
<td>Quiz 3</td>
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<td>Nov 19</td>
<td>Distributed &amp; Internet Systems</td>
<td>Chapter 12</td>
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<td>13</td>
<td>Nov 26</td>
<td>Implementation &amp; Maintenance</td>
<td>Chapter 13 &amp; 14</td>
<td>Quiz 4</td>
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<td>14</td>
<td>Dec 3</td>
<td>Project presentations/Review for Final</td>
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<td>Group report due</td>
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<td>15</td>
<td>Dec 10</td>
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<td></td>
<td>Final exam</td>
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