1. General Course Information
   Course: Systems Analysis and Design
   Course Number (section): MIS 301 (002) - 3 Credits
   Location: Planetary Hall 206, Fairfax Campus
   Time: Tuesdays 4:30 pm - 7:10 pm – Jan 20, 2015 - May 13, 2015
   Course Homepage: Blackboard
   Prerequisites: Grade of 'C' or higher in MIS 310 (Database Management Systems)

2. Instructor Information
   Professor: Greg Hampe, Assistant Professor, ISOM
   Office: Enterprise Hall 154, Tel. 703-993-1874
   Email: ghampe@gmu.edu
   Office Hours: 1:30 to 2:30 Tuesday and Thursday (also by appointment)

3. Course Objectives
   Course Description
   Information systems (IS) play 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. To accomplish this, IS professionals must bear a unique combination of business
   knowledge, communication skills, 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.

   Related IS Job Functions
   The skills and competencies developed in this course may be typically used by Systems Analysts,
   Business Analysts, Project Managers, Technical Writers, as well as other functions within the System
   Development process.

   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.
4. Required Course Materials

Text


There is a seventh edition as well, but there are some content differences between the sixth and seventh editions. Assignments and tests build on the sixth edition.

It is essential in this class to have the textbook.

Software

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.

Software is available from the Dreamspark site for the School of Business – read the information on accessing the GMU site here: [http://business.gmu.edu/technology/software/](http://business.gmu.edu/technology/software/).

Do not send me questions on getting the software – first go to the website above and read the questions and answers and follow directions.

5. Tentative Class Outline (subject to revision)

<table>
<thead>
<tr>
<th>Date</th>
<th>#</th>
<th>Topic</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/20/15</td>
<td>Tue</td>
<td>The Systems Development Environment</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>01/27/15</td>
<td>Tue</td>
<td>The Origins of Software</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>02/03/15</td>
<td>Tue</td>
<td>Project Management</td>
<td>Chapter 3 &amp; Tutorial: Using Microsoft Project</td>
</tr>
<tr>
<td>02/10/15</td>
<td>Tue</td>
<td>Planning</td>
<td>Chapter 4 &amp; 5</td>
</tr>
<tr>
<td>02/17/15</td>
<td>Tue</td>
<td>Determining Requirements</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>02/24/15</td>
<td>Tue</td>
<td>Modeling Process / Review for Mid-term (Bring your laptop)</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>03/03/15</td>
<td>Tue</td>
<td>MID TERM</td>
<td></td>
</tr>
<tr>
<td>03/10/15</td>
<td>Tue</td>
<td><strong>Spring Break</strong></td>
<td></td>
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</tbody>
</table>
6. Assignments, Grading and Policies:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (4)</td>
<td>10% (individual effort)</td>
</tr>
<tr>
<td>Assignments (2)</td>
<td>20% (individual effort)</td>
</tr>
<tr>
<td>Group Project</td>
<td>20% (group effort)</td>
</tr>
<tr>
<td>Mid Term Exam</td>
<td>20% (individual effort)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20% (individual effort)</td>
</tr>
<tr>
<td>Participation &amp; Professionalism</td>
<td>10% (individual effort)</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Quizzes (10%): There will be 5 short review quizzes given to ensure proper understanding of the class material. Each will be worth 2% 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 (20%): 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. There will be two writing assignments related to course material and concepts. Each writing assignment will be worth 5% of your final course grade. These will be individual efforts.

- Writing Assignment 1 – Methodology review and analysis
- Writing Assignment 2 – application of methodology to the system project

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 goal of the project is to give you the opportunity for a hands-on experience in all the key phases of the system development life cycle (SDLC): planning, analysis, design, implementation, and maintenance. The project is worth 20% of your semester grade and will consist of multiple deliverables that must be turned in throughout the remaining part of the semester.

Students will be formed into teams, you will have some input on your teams.

Each team will have to select a team leader and the team leader will be responsible for submitting the deliverables via Blackboard. Detailed requirements and grading criteria for each deliverable are specified in the group project description posted on BB at the beginning of the semester. The projects should progress in parallel with the topical areas of the lectures and assignments.

Each team will be asked to present their projects to the class in the last session. Peer evaluations will be requested from each project member at the end of the semester (Peer evaluation forms will be posted online and are expected to be turned in prior to the presentation.) Individual grades may be adjusted up or down from the group grade based on peer evaluations.

Tests (40%): 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 20% of your final course grade, and it will focus on the second half of the semester but may include overarching themes from course.

Participation and Professionalism (10%): All students are expected to contribute in the classroom. Quality of contribution in class is much more important than quantity. 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. In-classroom participation counts for 7% of the final course grade.

You will be asked to submit a photo and very brief paragraph during the first week of class. The photo and paragraph are to be in a single Microsoft word document and posted to Blackboard with a file name as follows: lastname_firstname_MIS330.doc

You will be asked to contribute to the class by suggesting final exam questions towards the end of the semester. Your quality contribution counts for 1% of the final course grade. Detailed requirements will be posted to Blackboard as an assignment and the deadline for this assignment will be announced in class (it is not specified in the tentative class outline).

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, texting others, and eating food during the class) shows a lack of professionalism and may affect your participation grade. Even though course attendance is not required, you should let me know if you were unable to attend a class, just as you would if you were unable to attend a business meeting you were invited to. If you miss a class session, you are responsible
for the content of that day’s discussion and for finding out from your classmates what was discussed. Professionalism counts for 1% of the final course grade.

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.

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 20% 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 being late or not being accepted.

No extensions will be given for any assignment unless prior arrangements with me have been made and only on a case by case basis for unavoidable and special circumstances.

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 grade is returned to submit a written request for re-grading. After one week, no changes will be considered.

Grading for the course will be based on total points earned by the end of the course. Final course letter grade assignments will approximate the table below.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93% or above</td>
</tr>
<tr>
<td>A-</td>
<td>90% to &lt;93%</td>
</tr>
<tr>
<td>B+</td>
<td>88% to &lt;90%</td>
</tr>
<tr>
<td>B</td>
<td>82% to &lt;88%</td>
</tr>
<tr>
<td>B-</td>
<td>80% to &lt;82%</td>
</tr>
</tbody>
</table>

7. Student Responsibilities

Students are expected to attend class each week and to participate in class discussions and exercises. Students are expected to complete assignments on time. Students are expected to respect their instructor and fellow classmates, both in and out of the classroom environment. Students are expected to turn off or silence their mobile phones during class time.

Attendance Policy:

Attendance in this class is highly recommended in order to be successful in learning the course content. The student is solely responsible for all assignments and material presented in class even if missed due to absence.
8. Email Communication
By policy of the University and to help protect confidentiality, students are must use their official George Mason email accounts for communication with the instructor and other students in the class. All emails from the instructor will be sent to your official George Mason email email addresses.

9. Learning Goals

Learning goals for the Undergraduate Programs
1. Our students will be competent in their discipline.
2. Our students will be aware of the uses of technology in business.
3. Our students will be effective communicators.
4. Our students will have an interdisciplinary perspective.
5. Our students will be knowledgeable about global business and trade.
6. Our students will recognize the importance of ethical decisions.
7. Our students will be knowledgeable about the legal environment of business.
8. Our students will be knowledgeable about team dynamics and the characteristics of effective teams.
9. Our students will understand the value of diversity and the importance of managing diversity in the context of business.
10. Our students will be critical thinkers.

Learning Goals of the Information Systems and Operations Management Program
1. Apply knowledge of information technology and business functions to understand its application in assessing, designing and improving business processes.
2. Develop data organization, storage and processing solutions to support organizational needs for information management. They will also have the option of developing skills in the area of supporting decision making through business intelligence solutions.
3. Use knowledge of computer networks as part of the IT solutions for improving business processes. They will also have option of developing more advanced skills in the areas of network and security.
4. Effectively manage information technology projects.
5. Understand the overall systems development life cycle and be able to recommend IT system solutions accordingly. They will also have option of learning appropriate development tools to develop prototype of IT solutions for business management.

10. School of Business Standards of Behavior:
The mission of the School of Business at George Mason University is to create and deliver high-quality educational programs and research. Students, faculty, staff, and alumni who participate in these educational programs contribute to the well-being of society. High-quality educational programs require an environment of trust and mutual respect, free expression and inquiry, and a commitment to truth, excellence, and lifelong learning.

Students, program participants, faculty, staff, and alumni accept these principles when they join the School of Business community. In doing so, they agree to abide by the following standards of behavior:
- Respect for the rights, differences, and dignity of others
Honesty and integrity in dealing with all members of the community
Accountability for personal behavior

Integrity is an essential ingredient of a successful learning community. Ethical standards of behavior help promote a safe and productive community environment, and ensure every member the opportunity to pursue excellence. School of Business can and should be a living model of these behavioral standards. To this end, community members have a personal responsibility to integrate these standards into every aspect of their experience at the School of Business. Through our personal commitment to these Community Standards of Behavior, we can create an environment in which all can achieve their full potential.

11. Honor Code Statement:

Honor System and Code: The Honor System and Code adopted by George Mason University will be enforced for this class:

http://oai.gmu.edu/the-mason-honor-code/

In your work on all written assignments, keep in mind that you may not present as your own the words, the work, or the opinions of someone else without proper acknowledgement. You also may not borrow the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgement. Please note: Faculty are obligated to submit any Honor Code violations or suspected violations to the Honor Committee without exception.

The appropriate version of the School of Business “Recommendations for Honor Code Violations” should be attached.

12. Business Library Liaison Information:

Jo Ann J. Henson, MLIS Business and Economics Liaison Librarian
Fenwick Library Fairfax Campus: http://infoguides.gmu.edu/business

13. Disability: If you have a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 703-993-2474. All academic accommodations must be arranged through the ODS. Please take care of this during the first two weeks of the semester. More information about ODS is available at http://www.gmu.edu/student/drc

14. Religion: Students who will miss class for religious reasons should inform me of their anticipated absences as soon as possible.

15. Counseling center: George Mason University has a counseling center that can provide assistance if you find yourself overwhelmed by life, want training in academic or life skills, or the like. More information is available at http://www.gmu.edu/departments/csd/.

16. Writing Guidelines (if relevant for the course): Unless otherwise specified, all writing assignments should be formatted as follows: double-spaced, Times New Roman, 12-point font, and 1-inch margins. To cite and reference professional or academic sources, please use APA style. Specific instructions for in-text citations and referencing are found in the Publication Manual of the American Psychological Association, 6th Edition or at http://owl.english.purdue.edu/owl/resource/560/01/.

To help manage the citations and seamlessly create reference lists, Mason supports a free software called Zotero. Please go to https://www.zotero.org/

This program offers:
- Centralized bibliography management
- Ability to sync across computers
- Ability for teams to combine contributions to the references
- Word plug-in that allows citation management within MS word

George Mason University has a writing center that can help you improve your English writing skills. More information is available at http://writingcenter.gmu.edu/

17. Inclement weather & campus emergencies: Information regarding weather related changes in the University’s schedule (e.g., closing or late opening) will be provided on the GMU website and via MasonAlert. Students sign up for the Mason Alert system to provide emergency information of various sorts at https://alert.gmu.edu.

TEXT INFORMATION

HOFFER


Used hard copy editions are available for purchase and rent at the bookstore, they may also be available online and through other used textbook sellers. You will need your text in the first week of class.

There is a seventh edition as well, but there are some content differences between the sixth and seventh editions. Assignments and tests build on the sixth edition.