ISM 4117: DECISION SUPPORT SYSTEMS

Spring 2009 · Tuesdays and Thursdays · RBA 208 · 11 AM - 12:15 PM

INSTRUCTOR
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Office Hours: T/R 12:30 – 1:30 PM, and by appointment

COURSE INFORMATION

Course Web Site: http://campus.fsu.edu. ***It is your responsibility to check this web site frequently for announcements.***

Course Text: Turban, Efrain; Aronson, Jay E.; Liang, Ting-Peng; and Sharda, Ramesh. *Decision Support and Business Intelligence Systems*, 8/e Upper Saddle River, NJ: Prentice Hall, 2007. ISBN: 0131986600

Additional Readings: Students will select a book for a book presentation. This book will need to be purchased by the student.

Additional readings will be a part of this course. These readings will be available on Blackboard.

Additional Recommendations: Reference material for applications development software; such as, Cold Fusion. You should defer any purchases; however, until project assignments have been distributed and discussed.

COURSE OBJECTIVES & FORMAT

Decision Support Systems, ISM 4117, is the capstone class for MIS majors. The format for this course is a mixture of lecture, discussion, demonstrations, and student presentation.

The primary objectives of the course are for the students to:

- Develop an understanding of business strategy concepts.
- Develop an understanding of how information technology (IT) can be integrated into organizations to create and sustain competitive advantage.
- Develop an understanding of the role of computers in direct support of managerial decision-making.
- Integrate and reinforce knowledge gained from prerequisite classes in systems analysis and design, database, programming, and project management.
- Apply this understanding to the design of typical systems for managerial decision support.

Students are also ***expected to refine the skills necessary for success as an information technology professional***, including staying informed of trends and developments in the field of IT, ***effective oral and written communication***, and mastery of technical material through self-guided learning.

When you have finished this course, you should be able to:

- Understand the concepts of decision support systems structures and the principles of their design.
- Analyze typical decision situations to determine whether it is practical to support them with computer technology, and if so, how.
- Design and implement a decision support system.
- Understand emerging technologies, business models, and issues in the context of decision support systems as well as the management of information technology.
- Understand how IT can be used to support strategic decision-making in organizations.
- Gain an appreciation of working on systems development projects in a team environment and obtain experience with project management.

KEY DATES

Exams	
Exam One	Thursday, February 26th
Exam Two	Thursday, April 16th
DSS Project	
Deliverable One	Thursday, January 29th
Deliverable Two	Tuesday, February 24th
Deliverable Three	Thursday, March 26th
Deliverable Four	Tuesday, April 21st
DSS Project Presentations	Tuesday & Thursday, April 21st and 23rd
Book Presentation	
Does IT Matter?	Thursday, January 29th
The Big Switch	Thursday, January 29th
Competing on Analytics	Thursday, February 12th
Freakonomics	Thursday, February 19th
Working Knowledge	Tuesday, March 3rd
The Wisdom of Crowds	Thursday, March 19th
Open Innovation	Thursday, April 2nd
Database Nation	Thursday, April 2nd
The Future of Work	Thursday, April 9th
New Age of Innovation	Thursday, April 9th

COURSE REQUIREMENTS, GRADING, AND POLICIES

This course has two stated prerequisites: ISM 4113 (SAD) and ISM 4212 (database). Students who have not completed these classes will be dropped from the class roster. It is not necessary to have completed ISM 4220 (Data Communications) prior to taking this class. In addition, this course requires the development of a major management support system as part of a small development team. ***You will not do well on the project if you have not developed strong programming skills and are unable to learn new programming languages on your own.***

Your grade will be determined according to the following percentages:

Course Activity	Weight
Executive Presence	10 %
Book Presentation	15 %
Exam One	15 %
Exam Two	20 %
DSS Project (Four Deliverables)	25 %
Group Participation (DSS Project)	5 %
DSS Project Presentation	5 %
Assignments	5 %

The policies outlined below are set to help you finish assignments, give you guidelines for appropriate conduct, ensure fairness for all students in the class, and help you learn as much as possible. If you have any questions or would like to give me some feedback on any of the policies (or anything else about the course), please feel free to email or come see me.

Be aware that all assignments will be graded for both content and presentation. Double-check your work to assure that it is "polished" and does not contain typos or grammatical errors. Poorly written work will be graded significantly below what it would receive if graded on content alone.

Final Grade	Total Points	Final Grade	Total Points
A	93-100%	C+	77-79.99%
A-	90-92.99%	C	73-76.99%
B+	87-89.99%	C-	70-72.99%
B	83-86.99%	D	63-69.99%
B-	80-82.99%	D-	60-62.99%
		F	Below 60%

Executive Presence

Much of your learning will occur as you prepare for and participate in class discussions. Most people in business are evaluated much more on what they say, how they say it and how they present themselves than on what they write. The classroom gives you the opportunity to hone your discussion, debating and impression management skills. Your participation will not be evaluated based on what you know, but rather, on what you contribute. At the same time, effective

participation has much more to do with quality than quantity. In other words, those who dominate air time without contributing to the advancement of the discussion will not be rewarded.

As this component of your grade is aimed at helping you develop your executive presence and discussion skills, it is important to note that some people feel it is acceptable to "multi-task" while in class and in meetings. Unless you are being disruptive, I will not prevent you from surfing the web, chatting on IM, or checking your PDA/cell phone for messages. However, just as managers in business observe this behaviour, so do I. While I cannot negatively impact your compensation or promotability (as will be the case in your professional careers), I can and will impact your Executive Presence grade if you engage in these activities.

Criteria for executive presence credit include attendance, punctuality, level of preparation, and professionalism. I encourage you to engage in critical thinking, to challenge without showing disrespect and to put forward your ideas for consideration. I evaluate performance after each class. I will post a tentative executive presence grade following Exam One for you to gauge your performance during the semester.

Book Presentation

A group (no more than two students) will read one of the books from the Reading List (located in Blackboard under Syllabus) and prepare a book presentation and an executive summary (no less than two pages and no more than three pages – double-spaced/ 1 inch margin/ Times New Roman 12 pt font), based on the book to present to the class. Each group will have thirty (30) minutes to present its lecture. Ideally, this will include ~ twenty (20) minutes of presentation time and ~ ten (10) minutes of scheduled Q&A/ discussion. If the class roster indicates an odd number of students enrolled, I will allow one group of three for the book presentation. ***Both the executive summary and book presentation slides must be turned in, via Digital Dropbox, no later than the beginning of the class prior to the presentation unless otherwise noted.***

A sign-up sheet is posted outside my office, RBB 126F. You and your partner(s) must sign up for a book and designated date no later than ***Tuesday, January 13th***, before the beginning of class (or lose 20 % of your potential grade on this assignment). Books may not be changed once your group has signed up. Book presentations must be given on the assigned day. ***No late assignments will be accepted.***

Please note that the content of these books may appear on the exams in this course. Your fellow classmates are counting on you to provide them with the relevant information (in the presentation slides and executive summary) to address questions on their exams. I will be posting the presentation slides and executive summary in the Book List section on Blackboard.

The executive summary must ***at least*** address the following questions:

- What is the main problem or question the author is addressing?
- What is the proposed solution or main idea the author is expressing for this book?
- What impact does this book have on decision-making, decision support systems, and organizations?

The book report presentation should cover the following issues:

- Overview of the main points of the book. Synthesize and integrate the main ideas, rather than present a chapter by chapter summary.
- Your assessment of the best parts of the book, and the worst parts of the book.
- How the content from this book is relevant for the IT industry and/or IT professionals.
- What are the key summary points/ conclusions that are relevant to you and your classmates?

An example presentation of the book *Good to Great* is available on Blackboard. In addition, ***prepare several thought provoking questions to stimulate class discussion*** about issues raised in your book and lead the discussion. ***Your group is responsible for managing time for your presentation and the discussion must fill the full thirty (30) minutes.***

Examinations

All exams will be closed book and closed notes. The exams in this course may consist of multiple-choice, true-false, and short answer essay questions. Exams cover text readings, lectures, outside readings, and material presented by guest speakers (including student presentations). They will emphasize interpretation and application of course material, not memorization. As much as possible, each exam will cover material in the portion of the class that precedes it. However, knowledge is cumulative, and successful completion of an exam may require mastery of material covered earlier in the semester.

Take exams during the scheduled time. If, due to emergency or illness, you know you will miss a scheduled exam, it is your responsibility to let me know ahead of time or worst case, within twenty-four (24) hours of the missed exam. Make up examinations may be oral, essay, or another format, as determined by the instructor.

Assignments

There will be two assignments during the semester. The first assignment will focus on reading comprehension and the development of an executive summary to test your ability to convey IT-related information to an executive. The second assignment will focus on the use of a decision support system. These are to be completed and submitted individually, although I encourage you to work through any problems with your classmates. These assignments must be turned in via the Digital Dropbox. Late submissions will be penalized.

DSS Project

Group Project: The group project gives you hands-on experience designing and building a decision support system for an organization. The project provides a unique opportunity to gain experience with the types of issues and challenges you will have to deal with once you graduate and join the ranks of IT professionals. ***There will be absolutely no instruction on software used to develop the DSS project. It is expected that you have an inventory of development tools that you can draw upon to organize and implement these projects.*** Further, it is specifically expected that you know how to learn a new programming language or how to research and use new features for languages with which you have some familiarity. Details on the semester project will be provided in a separate handout later in the semester.

Assignments are due on the dates listed, at the beginning of your assigned class period. To assure that there are no last minute problems, you are expected to manage your time to allow for any possible glitches. Technology related reasons (busy computer labs, corruption of files without backups, computer/printer/network failures, etc.) and time management issues (work-related conflicts, work in other courses, locked doors, etc.) are not acceptable justifications for late submissions. Extensions will be granted for documented medical or family emergencies only. In such cases, please notify me as soon as possible.

Keys to Success: The DSS project requires that you design a system and then build it. This is an important difference from programming assignments you may have had in prior classes. Typically, programming assignments require you to implement programs that accomplish given stated requirements. In this class, the project requires that you develop those requirements. For many students, this process is a key determinant of project success.

There are several characteristics and behaviors that differentiate successful students from those who struggle with the class. In general, successful students:

- Make coordination with the instructor a regular part of their study process and their project implementation. This corresponds to the habit of staying in touch with your manager or your customer in a business environment.
- Get their project underway early and stay on top of the project. Successful students recognize that programming always involves unknowns and problems no matter how competent they are, and they allow time for resolving the problems. They also pay attention to project documentation.
- ***Successful students do not wait for things to happen or to be explained or delivered to them. They initiate and try to take control of their studies, their projects, and their lives.***

Course Readings

The course schedule lists readings that are to be read prior to class. For example, readings listed for March 26th are to be read prior to class on March 26th.

Late Assignments

A penalty of 20% per day late will be assessed on assignments turned in after the beginning of class on the scheduled due date. A day is defined as twenty-four hours. Thus, homework assignments turned in within 24 hours of the due date (including weekends or holidays) – including those turned in late during your class period – can, at best, earn 80% of the points for that assignment. ***No credit will be given for assignments and/or project deliverables turned in more than 48 hours after the due date.***

ADA Requirements

Students with disabilities needing academic accommodations should:

1. Register with and provide documentation to the Student Disability Resource Center (SDRC).
2. Bring a letter to the instructor form the SDRC indicating you need academic accommodations. This should be done within the first week of class.

For more information about services available to FSU students with disabilities, contact the Assistant Dean of Students:

> sdrc@admin.fsu.edu , Disabled Student Services , Kellum Hall, Florida State University, Tallahassee, FL 32306-4066, (850) 644-9566.

College of Business Integrity Code

The Florida State University College of Business expects all of its students, faculty and staff to adhere to the highest standards of academic excellence, integrity, and to the norms of a serious intellectual community. We pledge that:

As business students and professionals

We understand and accept the
significance of integrity in
our language, actions, and work

With Seminole pride,
we choose to be responsible, honest,
trustworthy, caring, and fair

In business and in life,
we choose integrity

Students are expected to be familiar with and abide by the **Student Academic Honor Policy** which outlines the University's expectations for students' academic work, and the **Student Conduct Code** which informs students about their rights and responsibilities as members of the University community.

Date	Topic	Preparation (*To be done prior to class*)
Jan. 6th	Course Introduction	Introductions, Syllabus, & Book List Discussion
Jan. 8th	*TOTN: Impressing their friends*	
Jan. 13th	Executive Summaries & Presentations; Class Exercise; Group Project Information	Read Harvard Business Review Article (on Blackboard); **BOOK PRESENTATION SIGN-UP DEADLINE**
Jan. 15th	Decisions, Strategies, & IT	Read WSJ & HBR Article (on Blackboard); **ASSIGNMENT ONE (EXECUTIVE SUMMARY) DUE**
Jan. 20th	Limitations of Individual DM	Bring a QUARTER to class (exercise)
Jan. 22nd	Strategy Starts with a "Vision"	Read Ch 1 – DSS & Business Intelligence
Jan. 27th	Decision-making in Organizations	Read Ch 2 – DM, Systems, Modeling, & Support
Jan. 29th	*Does IT Matter & The Big Switch*	**DELIVERABLE ONE DUE**
Feb. 3rd	DSS Fundamentals	Read Ch 3 – DSS Concepts, Methodologies & Technologies
Feb. 5th	Types of DSSs	Demonstration Day
Feb. 10th	Data Modeling & Analysis	Read Ch 4 – Modeling & Analysis
Feb. 12th	*Competing on Analytics* & Data Visualization	Read Ch 6 – Business Analytics & Data Visualization (ONLY pages 266-280); **ASSIGNMENT TWO (DSS) DUE**
Feb. 17th	Data Warehousing	Read Ch 5 – Data Warehousing
Feb. 19th	*Freakonomics* & Data Mining	Read Ch 7 – Data, Text, & Web Mining
Feb. 24th	*TOTN: Great artists steal* & Exam Review	**DELIVERABLE TWO DUE**
Feb. 26th	**EXAM ONE**	
Mar. 3rd	*Working Knowledge*	Read Ch 11 – Knowledge Management; Complete Knowledge Exchange Survey (on Blackboard)
Mar. 5th	Knowledge Management	
Mar. 10th	**NO CLASS – SPRING BREAK**	
Mar. 12th		
Mar. 17th	Collaborative Management Technologies	Read Ch 10 – Collaborative Computer-Supported Technologies & GSS
Mar. 19th	*The Wisdom of Crowds* & Collective Intelligence Demo	Read Instructions (on Blackboard)
Mar. 24th	**PROJECT WORKDAY**	
Mar. 26th	Artificial Intelligence & Expert Systems	Read Ch 12 – Artificial Intelligence & Expert Systems & **DELIVERABLE THREE DUE**
Mar. 31st	IT & New Business Models	Read Ch 14 – Intelligent Systems over the Internet
Apr. 2nd	*Open Innovation & Database Nation*	
Apr. 7th	Future of DSSs	Read Ch 16 – Integration, Impacts, and the Future of MSS
Apr. 9th	*The Future of Work & New Age of Innovation*	
Apr. 14th	*TOTN: Wiring the world* & Exam Review	
Apr. 16th	**EXAM TWO**	
Apr. 21st	**PROJECT PRESENTATIONS – ATTENDANCE REQUIRED (APRIL, 21ST & 23RD)**	
Apr. 23rd	**& PROJECT DELIVERABLE FOUR DUE (APRIL, 21ST)**	