

## Information Systems Department UMBC

### Course information

Course: IS 425 – Decision Support Systems

Term: Spring 2017

Instructor: Ms. Tasha Richburg, MBA, MIS

Office/Office Hours: Immediately after class or by appointment

E-Mail: tasharichburg@verizon.net

Textbook: Decision Support and Business Intelligence Systems, 10th edition by Efraim Turban, Ramesh Sharda & Dursun Delen. Prentice Hall.

## II. Course Details

**Course Description:** This course provides an overview of the theoretical and organizational aspects of decision support systems (DSS), including descriptive and prescriptive decision making concepts, individual and group decision support systems, and executive information systems. Management of DSS within the end-user environment also is discussed. Broad concepts related to decision making models are discussed as well as the design and development of DSS, ESS and other recommended systems. Projects using DSS concepts are required. Real world case examples and current and future trends will be discussed.

**Course Pre-Requisites:** IS 410, MGMT 210, MATH 215 or MATH 221 with a “C” or better.

**Course Format:** The course material will be presented in a variety of ways. Lecture and class discussion will be utilized, as well as learning via presentation and small group work. Blackboard will be used to send and receive **all** assignments and to track grading. Be sure that your UMBC email is active and working and **check Blackboard regularly**. If you are unable to attend class for any reason, please see a classmate for notes and class discussion topics missed. Students should come to class ready for class discussion.

**Course Objectives:** Following completion of this course, the student should be able to:

- a) Describe fundamental concepts in decision support systems;
- b) Understand and explain the strengths and limitations of human decision-making behavior;

- c) Distinguish among individual, group and organizational decision making and related decision support systems;
- d) Understand and use basic decision models;
- e) Understand the fundamentals of decision support systems design and development;
- f) Gain a preliminary understanding of special decision support systems tools and techniques.

### **III. Evaluation**

**Evaluation:** Final grades will be awarded as follows: “A,” indicates superior achievement; “B,” good performance; “C,” adequate performance; “D,” minimal acceptable achievement; “F,” failure. “W” indicates a course dropped after the end of the Schedule Adjustment Period.

#### **Evaluation**

Exam 1	100 points
Exam 2	100 points
Group Project/Presentation	150 points
Case Study/Participation/Homework	100 points
Self-Assessment	<u>50 points</u>
	500 points
450 - 500 points	A
400 - 449 points	B
350 - 399 points	C
300 - 349 points	D
348- below points	F

#### **Self-assessment**

Students must also write a one-page self-assessment and submit to Blackboard based on their group project, answering the following questions:

1. What were your roles and responsibilities on the group project?
2. How were the responsibilities decided?
3. What did you learn about project management by doing the group project?
4. What did you learn about teamwork by doing the group project?
5. What would you have done differently?

6. What will you remember to do on the next project you work on after this experience?
7. Briefly assess each team member's performance.
8. If you had to give them a grade, what would it be and why?
9. If you had 100 points to allocate to your team, how would you allocate them and why?

**Assignment Submission:** Check Blackboard for homework assignments. All assignments must **be submitted via Blackboard** by the due date specified on Blackboard. Late assignments **will not be accepted**. **Only assignments submitted via Blackboard link will be graded** so please insure that the correct file is submitted. No assignments will be accepted via any other method of submission.

**Group Project:** Students, working in groups of approximately four, will create a **logical model** of a decision support system. This project will be presented in to the class. Students should prepare a proposal, draft and final group project, see course schedule for due dates. Students will also provide an assessment of both themselves and their team mates to evaluate group performance on the group project. (See Self-assessment)

### **Project Notebook (100pts)**

Each group will hand in a project notebook that includes the following:

#### **Seven-page Research Paper (cite at least three references) (100 pts)**

1. Cover page and detailed table of contents. List the project name, team members, and date the cover page of the notebook. Be sure to number all pages, which should provide a reference for the table of contents. You may include tabs or dividers between major sections of the notebook, too.

2. Introduction- State the DSS research problem/objective
3. Write your analysis of the research problem/objective
4. Write how the research problem relates to DSS methodology
5. Diagram a logical design of a DSS that will either solve the research problem or meet the research objective
6. Write your lessons learned.

#### **Team Presentation (20 minutes) (50 pts)**

Collect one PowerPoint slide from each team member to present as part of a team presentation.

PowerPoint slide format

- Slides with 5 bullets can't exceed 7 words per slide.
- Slides with 7 bullets can't exceed 5 words per slide.

Slide presentation content:

- What is the focus of the research problem?
- What are your lessons learned

The presentation will be graded as part of the group project. Every student is expected to attend all project presentations.

#### **Team Case Study Presentation (15 Minutes) (30 pts)**

1. Present an overview of the case study
2. Answer the case study questions.
3. Discuss on the case study relates to the chapter's topic
4. Discuss your lessons learned

**Participation:** The participation grade will be based on the student's active participation during the course. Attendance will be taken daily, but attendance is only a small part of participation. The student should actively engage in the class by, posting weekly journals on Blackboard, both asking and answering questions, providing meaningful insights during class discussions, and demonstrating preparation for class.

#### IV. Course Policies and Expectations

1. Regular punctual attendance is expected of all students. Students must remain for the entire class period to be credited for the class. Students are responsible for all announcements, material covered, and assignments due when absent from class. The instructor recommends exchanging contact information with other students to share lecture notes. If a student must miss class, he/she is expected to notify the instructor by email.
2. Students are expected to read the chapter assignments before coming to class and be prepared to discuss topics in class.
3. Arriving late is disruptive to the class. Habitual tardiness will result in a reduced participation grade.
4. Late assignment submissions are not accepted. Assignments not submitted by the deadline will receive a grade of zero. Late assignments may be accepted as determined by the instructor in the event of an unavoidable and unforeseeable emergency. The student may be required to provide written proof of unavoidable emergency as determined by the instructor.
5. Students are expected to put away all electronic devices during the class. The use of mobile devices (i.e. phones, tablets, etc) during the lecture are strictly prohibited. Texting, using email, and browsing the web is not permitted during the lecture session unless doing so is a part of the class sessions planned activities and students are instructed to do so by the instructor. Students who need to leave their phone on for special circumstances may speak with the instructor individually (i.e. childcare, on-call employment, etc.). The instructor retains the right to ask a student to place a device in the front of the class. Students who are uncooperative will be asked to leave the classroom for the remainder of the class session.
6. Exams must be taken as scheduled. Tests not taken at the scheduled time will receive a grade of zero. If you are unable to take your exam at the scheduled time due to an emergency (hospitalization, car accident, etc.), contact the instructor immediately to make arrangements to take the exam. Documentation may be required. Make-up exams will only be given in the event of an extreme emergency.
7. Students are expected to participate in each class session. Questions asked and answered during this time will aid in your understanding of the material and assist other students in the class.

**Attendance Policy:** All students are expected to attend class regularly and punctually to derive maximum benefit from instruction and to contribute to the learning process in the classroom. Attendance will be taken for each class.

**Student Support Services:** UMBC is committed to eliminating discriminatory obstacles that disadvantage students based on disability. Student Support Services (SSS) is the UMBC department designated to receive and maintain confidential files of disability-related documentation, certify eligibility for services, determine reasonable accommodations, develop with each student plans for the provision of such accommodations, and serve as a liaison between faculty members and students regarding disability-related issues. If you have a disability and want to request accommodations, contact SSS in the Math/Psych Bldg., room 213 or at 410-455-2459. SSS will require you to provide appropriate documentation of disability. If you require accommodations for this class, make an appointment to meet with me to discuss your SSS-approved accommodations."

**Academic Integrity:** ([http://umbc.edu/undergrad\\_ed/ai/students.html](http://umbc.edu/undergrad_ed/ai/students.html)) By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory. All members of the UMBC community are expected to make a commitment to academic honesty in their own actions and with others. Academic misconduct could result in disciplinary action that may include suspension or dismissal.

Following are examples of academic misconduct that are not tolerated at UMBC:

☐ Cheating:

Knowingly using or attempting to use unauthorized material, information, or study aids in any academic exercise.

☐ Fabrication: In

information or citation in an academic exercise.

☐ Facilitating

or knowingly helping or attempting to help another commit an act of academic dishonesty. ☐

Plagiarism: Knowingly representing the words or ideas of another as one's own in any academic exercise, including works of art and computer-generated information/images. Students in this course will be expected to submit assignments via SafeAssign links for some assignments and to perform all their own, original work on every assignment. Failure to do so will result in a minimum consequence of a grade of 0 on the assignment.

**On-line Course Evaluations:** Students will be asked to complete an on-line course evaluation at the end of the semester. This will take the place of the "bubble sheets and blue sheets" found as evaluation tools for other departments at UMBC. Please respond to the emailed survey as soon as you receive it to avoid multiple emails from the evaluation company. The results of the evaluation are confidential and are not given to the instructor until the grades for that semester are submitted.

**Additional Note:** This syllabus and course schedule may be changed based on the needs of the class at any time with adequate notification. (\*Team responsible for Application Case discussion. Check the Black Board regarding the specific case study assigned to your group.)

- January 30, 2017 Course Introduction/ Chapter 1
- February 6, 2017 Chapter 2
- February 13, 2017 Chapter 3
- February 20, 2017 Chapter 4
- February 27, 2017 Chapter 5 – (\*13.4 & 14.1)
- March 6, 2017. Chapter 6 - (\*9.6 & 9.3)
- March 13, 2017 --- Exam 1 (Chapters 1 – 6)
- **March 20, 2017—SPRING BREAK**
- March 27, 2017 Chapter 7 - (\*12 & opening vignette)
- April 3, 2017 Chapter 8 - (\*13.5 & 14.3)
- April 10, 2017 BPM Chapter 9 - (\*11.2 & 11.5)
- April 17, 2017 Chapter 10 - (\*9.4 & 9.3)
- April 24, 2017 Chapter 11 - (\*10.4 & 10.1)
- May 1, 2017 Chapter 12 -(\*7.1 & 7.2)
- May 8, 2017 Chapter 13 -(\*8.5 & 6.1)
- May 15, 2017 Exam 2

### **Project Outline**

#### **Five to Seven-page Research Paper (cite at least three references) (100 pts)**

1. Cover page: Chapter number, List team members
2. Introduction- State the DSS research problem/objective
3. Write your analysis of the research problem/objective
4. Write how the research problem relates to DSS methodology

5. Write your lessons learned.
6. Ten Bonus Points: Write a logical design of a DSS that will either solve the research problem or meet the research objective

**Team Presentation (15 minutes/team presentation) (50 pts)**

Collect one PowerPoint slide from each team member to present as part of a team presentation.

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