### **University of Maryland, Baltimore County**

IS 202 Systems Analysis Methods Monday and Wednesday 1:00 – 4:10 Syllabus for Summer Session II 2015

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Office Hours: Wednesday 11 – noon or by

appointment

Text: Systems Analysis and Design, ninth edition, by Kendal and Kendal (2014)

**Course Description:** Overview of the system development life cycle. Emphasis on current system documentation through the use of both classical and structured tools/techniques for describing process flows, data flows, data structures, file designs, input and output designs, and program specifications. Discussion of the information gathering and reporting activities and of the transition from analysis to design.

**Course Objectives:** At the end of the course, students will have developed an understanding of the principles, components, and impact of information technology, information systems, and the systems development process.

**Course Format:** The course material will be presented in a variety of ways. Lecture slides will be presented. Lecture and class discussion will be utilized, as well as peer learning via presentation. Blackboard will be used to send assignments and as a communication tool for email and announcements. Be sure that your UMBC email is active and working.

Although class attendance is not counted toward or against your grade, students who regularly attend class and participate in class discussions are better prepared for assessments. If you are unable to attend class for any reason, please see a classmate for notes and class discussion topics missed. Please come to class on-time. Tardiness shows a lack of respect for both the instructor and your fellow classmates. Since you are preparing for a professional career, you need to develop professional habits.

**Exams**: There will be three exams in the course. Students will be expected to apply knowledge learned in class on the exams, not simply regurgitate facts.

The dates of the exams are as follows:

**July 15 –** Chapters 1 - 5. **July 27 –** Chapters 7 - 10.

**August 10 – Chapters 11 - 16.** 

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**Quizzes:** A quiz will be given in each class starting with class 2. The questions will be based on the material from the previous class. The quizzes will be given at the beginning of the class and anyone who arrives late will receive a zero for that days quiz. Makeup quizzes will not be offered but the lowest quiz grade will be dropped to allow for the possibility of a missed quiz due to an emergency. There will not be a quiz on exam days.

**Assignments:** There will be out of class assignments given regularly during the course. All assignments will be due by the start of the next class. Assignments submitted after 6pm on the due date, but no later than 36 hours late will receive an automatic 50% penalty. Assignments submitted more than 36 hours late will not be accepted.

**Group Project:** Students will be placed into teams in order to design a solution for a small business problem. The projects will be presented to the class on **August 12.** Team members will be announced on July 13.

Choose a company to analyze, one in which you are able to gain access and gather data.

The final group report will include the following parts:

**Problem Statement** – detailed description of current system and its problem(s); the who, what, when, where, why and how of the problem; (Approx. 2 pages)

**Systems Study** – data gathering techniques used – use questionnaires, interviews, and observations. Description of all three used. (Approx. 2 pages)

**Systems Alternatives** – describe the best alternatives developed – pros and cons of each alternative. (Approx. 2 pages)

**System Analyst's Recommendation** – describe the solution you will recommend and explain why it is better than the other alternatives? (Approx. 2 pages)

**Supporting Documentation:** Completed Questionnaires, question and responses used in interviews, observation notes, correspondence within your group and with the company, product research, and any information used in the project should be documented in a separate section.

**Data Flow Diagram for your solution:** – Draw Data Flow Diagrams \*Details to be provided\*

The project submission should list all team member's names, be typed, double-spaced, font 12, numbered pages, one-sided printing, grammatically correct with no spelling errors, well organized, and presented to the class as a group (15 mins per group). The presentation should be direct, concise, and professional. Please do not read your paper to the class – **present it**. A presentation evaluation form is on Blackboard. There will also be an anonymous peer evaluation at the end of the semester, in which each of the team members will grade the other team members. Any team member not actively participating in the project can be "fired" from the group by agreement of the other

members and therefore earn a zero for the project grade. The peer evaluation form will also be on Blackboard.

Late project submissions will not be accepted.

# **Grading:**

Exams 45%
Average of the six best quiz scores 20%
Assignments 15%
Group project 20%

# Policies:

### Grading:

IS instructors are expected to have evaluative instruments that result in a reasonable distribution of letter grades. With respect to final letter grades, the University's Undergraduate Catalogue states that:

"A, indicates superior achievement

B, good performance

C, adequate performance

D, minimal performance

F, failure"

There is specifically no mention of any numerical scores associated with these letter grades. Consequently, there are no pre-defined numerical demarcations that determine final letter grades; these can be defined only at the end of the semester when all accumulated points are tallied and compared. In accordance with the published University grading policy, it is important to understand that final letter grades reflect academic achievement and not effort. While mistakes in the arithmetic computation of grades and grade recording errors will always be corrected, it is important to understand that in all other situations, final letter grades are not negotiable and challenges to final letter grades are not entertained. Grades are earned not given.

It is expected that approximately 90% of the class will receive a grade of C or higher. This course may be taken on a pass/fail basis.

**Make-up Exams**: Missed exams will result in a grade of 0. If you know that you will be absent on the day of a scheduled exam, please notify me as far in advance as possible. If the reason for your absence is compelling and documented, you may be given a make-up exam. If you miss an exam because of an extreme emergency, contact me as soon as possible. If I agree that your emergency was, indeed, extreme, and it can be documented, a make-up exam will be given. If a make-up exam is given it may contain a different set of questions than the exam given to the class.

#### STATEMENT ON ACADEMIC CONDUCT:

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 and integrity. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty and they are wrong. Academic misconduct will result in disciplinary action that may include failure of the course, suspension or dismissal.

Acts of Academic Misconduct are defined as the following: To read the full policy on academic integrity, consult the UMBC Web site (http://www.umbc.edu/provost/AcademicIntegrity/index.html).

# **Student Support Services**

UMBC is committed to eliminating discriminatory obstacles that disadvantage students based on disability. Student Support

Services<<a href="http://www.umbc.edu/sss/html/sss\_disab.htm">http://www.umbc.edu/sss/html/sss\_disab.htm</a>>(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."

# **Tentative Course Schedule**

<b>Date</b>	<b>Topics</b>	Reading*
7/6	Class introduction. Systems, Roles, & Development Methodologies	Chapters 1 & 2
	Understanding & Modeling	
	Organizational Systems	
7/8	Quiz 1	Chapters 3 & 4
	Project Management	
	Introduction to Information Data	
	Gathering	
7/13	Quiz 2	Chapters 5
	Information Gathering Continued Project Team Formation	
7/15	Exam $1$ – chapts. $1-5$	Chapter 6
	Agile Modeling and Prototyping	1
7/20	Quiz 3	Chapters 7 & 8
	Using Data Flow Diagrams	-
	Analyzing Systems using Data	
	Dictionaries	
7/22	Quiz 4	Chapters 9 & 10
	Process Specifications & Structured	
	Decisions	
	Object-Oriented Systems Analysis and	
	Design	
7/27	Exam 2 chapts. 7 - 10	Chapter 11
	Designing Effective Output	
7/29	Quiz 5	Chapters 12 & 13
	Designing Effective Input	
	Designing Databases	
8/3	Quiz 6	Chapter 14
	Databases continued	
	Human Computer Interaction	
8/5	Quiz 7	Chapters 15 & 16
	Designing Accurate Data Entry	
	Procedures	
	Quality Assurance & Implementation	
8/10	Exam 3 Chapters 11 – 16	
8/12	Groups presentations – report due	

<sup>\*</sup>Readings should be completed before the scheduled class. All students are expected to be prepared to discuss the material in class.