IS 436-0101 Structured Systems Analysis and Design Fall 2004

Important Information

Meets: Monday & Wednesday, 4:00-5:15pm, in Social Science, room 111

Professor: Dr. Wayne Lutters
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Phone: (410) 455-3941
Office Hours: Mon & Wed, 5:15-6:00pm; online and by appointment

TA: Mr. Claud Zhi-Hang Pan

Lab: IS Open Lab (ITE-457)
Open: Mon-Fri, 9:30-4:00

Website: http://blackboard.umbc.edu/

Text: Dennis, A. & B.H. Wixom (2003). *Systems Analysis & Design* (second edition), J.Wiley&Sons.

Course Policies

OFFICE HOURS

Students are encouraged to take advantage of office hours. While I have arranged my official hours to best support the class sessions, I can usually meet at many other times of the week. Please request an appointment via e-mail to ensure that I will be available.

Students are welcome to raise any issues related to the course or their studies, however, as a policy I do not reiterate lecture material from classes which you have missed. It is best to download the lecture notes from Blackboard check with your fellow teammates or other classmates to cover absences.

From time to time I may need to request an informal meeting with your team. In this case, we will find a mutually convenient meeting time/place.

CLASSROOM CONDUCT

Regular attendance is expected, but not required. While attendance obviously affects your participation grade, a shared understanding of the course materials and expectations is also a critical component of your team's success.

If arriving late to class, please be courteous to your fellow students and instructor. Disruptive behavior cannot be tolerated. This also includes cell phones and pagers, which must be turned off for the duration of the class.

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. Acts of academic misconduct, as defined below, will result in disciplinary action that may include failure of the course, suspension, or dismissal. (Please consult the UMBC Student Handbook for the full policy.)

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

- **Fabrication:** Intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

- **Facilitation:** 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.

Grading Policies

GRADING STANDARDS

UMBC's Undergraduate Catalog states that, "A, indicates superior achievement; B, good performance; C, adequate performance; D, minimal performance; F, failure." There is specifically no mention of numerical boundaries that determine these final letter grades. These can only be defined at the end of the semester after all scores have been earned (usually using a "curve"). This means that it is not appropriate to assume that a given numerical score corresponds to a particular letter grade. It is also important to understand that final letter grades reflect academic achievement and not effort. All assignment grades will be posted on Blackboard and key grade distributions will be provided throughout the course to assist in measuring student performance.

GRADING DETAILS

IS 436 is a team-based, project course and is primarily evaluated as such. This is in-line with what you will experience as analysts in the workplace, where most SA&D efforts are evaluated solely on their final deliverables, regardless of individual contributions. (Some of you have already worked in teams and know that performance depends on skills in communicating, cooperating, and collaborating.) To ensure adequate representation of individual learning, however, the final course grades will be comprised of both group and individual components. There are 250 possible points to be earned in the course, with approximate percentage breakdowns as follows: (specific point values for each assignment will be announced and listed in the Blackboard gradebook.)

Group (60%)		Individual (40%)	
• Deliverables (five documents)	[45%]	• Exams (2 mid-semester)	[28%]
• Presentations (preliminary/final)	[15%]	• Exercises (in-class/take-home)	[8%]
• Team management activities	(*)	• Class participation	[4%]

(*) The group score can be modified by up to 10% of its total value to accommodate for egregious lapses in *personal effort*, as shown by the two team-based peer-evaluations, or *team management*, as shown by routine audits of the team workspace. Early warnings on these two criteria will allow time for repair.

LATE WORK

Assignments are due at the beginning of class or as indicated. Late assignments will not be accepted.

MISSING EXAMS

If you miss an exam, you will receive a zero grade. However, if you are aware of an unavoidable conflict in advance please talk to me. If I am given sufficient notice and I agree that your absence cannot be avoided, then I can arrange a makeup exam. The same may apply for extreme, unforeseen emergencies the date of the exam.

OIT instructions for registering for the IS 436 Blackboard 6 course website:

1.) Go to http://blackboard.umbc.edu
2.) When you press the "login" button, you will receive a UMBC "WebAuth" login prompt. Simply use your usual UMBC "kerberos" userid & password. You will then be redirected to your course or to the MyBlackoard screen that lists your available courses.
3.) If you have not enrolled in the online course before, click on the "course" button. Then click on "Browse Course Catalog".
4.) Type in a keyword for your course in the text box. For example, if you are taking an English course, type in ENGL. Click on "Go".
5.) Find your course site and click on the "Enroll" button on the far right side of the window. Click on "Submit", and "OK", when prompted to do so.

Team/Project Policies

BLACKBOARD

This course will rely heavily on its Blackboard website for discussions, posting announcements, archiving lecture notes, distributing assignments, online gradebook, etc. All students must verify enrollment after the first class (instructions on previous page) and check-in regularly. It is assumed that students will visit at least twice a week.

TEAM FORMATION

Project teams should consist of 4 members (variants require instructor approval). Factors to keep in mind when selecting your teammates include: class/work schedules, where you live, technical skills and experience. As you will be meeting at least once per week, logistical issues are critical. Also, it is beneficial to have teams comprised of members with different skills and abilities. Just choosing your good friends is not always the best strategy.

TEAM MANAGEMENT

As will be discussed during the first week of the course, it is beneficial to agree upon formal roles for team members. The most critical of these are team lead, editor, librarian, and site liaison. It is also important to agree upon systems of communication, collaboration, and justice. Advanced preparation will pay off in the long run.

Peer evaluations within the team will be conduced twice during the semester, mid-way and after the final presentation. These will focus on perceived individual cooperation and contribution. The role of these evaluations is to prompt personal reflection and to inform the instructor of any severe imbalances in the class. In general, your team is expected to function without instructor intervention, just as in the real world.

TEAM WORKSPACE

Your team is responsible for maintaining its own online workspace. At a minimum, this should include the latest versions of your deliverable documents and minutes from your regular meetings (summaries ~1-2 pages). Ideally, it would include all items related to the project (e.g., interview notes, key document drafts, communications).

A group workspace within the Blackboard course site will be provided for each team. This offers file exchange, a discussion board, chat, and broadcast e-mail functionality. While you are encouraged to use this space, you are free to establish a different information space (e.g., FTP or website) under the condition that it is open and available to the instructor and TA (i.e., provide the address and any passwords).

These team workspaces will be "audited" at regular, but unannounced, intervals throughout the semester. Remember to keep your materials current!

PROJECT DELIVERABLES

The details for each of the five central documents will be discussed in class and posted on Blackboard. Documents must be submitted on time in both paper and electronic format (*.rtf or *.html format only, no MS-Word docs). If you have any questions about generating these file formats please talk to the instructor.

Regarding formatting, these documents should be printed on plain white paper and stapled. Do not use any covers or binders. Each should have a coversheet listing the deliverable title, site, and team members. Remember to carefully proofread your work prior to submission.

I will review each document and return it with comments. During the course of the semester each team has the option of revising and resubmitting one of their five documents, ideally for a higher score. (Resubmissions can reclaim up to 50% of points lost. For example, the maximum possible rescore on a deliverable with a score of 17/25 would be 21/25.)

Tentative Schedule

Following is a tentative schedule of lecture topics, readings, assignment due dates, and the exam. The instructor reserves the right to adjust this schedule for any reason, given fair advanced notice both in class and on the Blackboard announcements page. In addition, the most current schedule will always be available under "Course Information." Please check Blackboard frequently to ensure that your information is up-to-date.

Date	Class Topic	Reading	Assignments Due
9/1	Course introduction, SA&D and project overview	CH 1	• Blackboard personal webpage
9/6	**No class** *(Labor Day)*		
9/8	Team dynamics, functional roles	CH 1	• Potential site/system list (e-mail)
9/13	Project planning, definition and management	CH 3	• Team roster (in-class + e-mail)
9/15	Understanding the organization & problem	CH 2	
9/20	Requirements gathering	CH 4	
9/22	Interviewing techniques	CH 4	• D1:"Project proposal"
9/27	Use case analysis & process modeling intro	CH 5	
9/29	Process modeling (e.g., DFD)	CH 6	
10/4	Data modeling (e.g., ERD)	CH 7	
10/6	Client presentations		• DFD exercises *Presentation*
10/11	Logic modeling (e.g., D-Tree)	CH 6	• D2:"Baseline project plan"
10/13	Modeling review		
10/18	Exam #1		*Exam #1*
10/20	Structuring system requirements	CH 19	
10/25	Discuss exam		• D3:"Structured requirements"
10/27	RAD/JAD/PD/Prototyping	CH 1,3,4	
11/1	Elements of the systems proposal		
11/3	User interface design	CH 10	
11/8	UI design continued (prototyping & evaluation)		
11/10	Design: accessibility & cross-cultural		• D4:"Systems proposal"
11/15	OO SA&D/UML introduction	CH 15	
11/17	UML continued (CASE tools)		
11/22	Architecture & software design	CH 9, 12	
11/24	Implementation	CH 13	
11/29	Maintenance	CH 14	• D5:"Systems design"
12/1	Exam #2		*Exam #2*
12/6	Project presentations		*Presentation*
12/8	Project presentations		*Presentation*
12/13	Project presentations, course wrap-up		*Presentation*
12/22	**No final exam**		