IS 451 - Networking Design and Management Spring 2017

Meeting Time: Monday 7:10pm – 9:40pm

Location: Performing Arts and Humanities Room 108

Instructor: Mike Borkoski

Instructor's Email: borkosk1@umbc.edu

Instructor's Office Location and Hours: ITE 405/407 Every Monday 6:00pm – 7:00pm, or by appointment

Course Description: This course covers design and administration of enterprise networking and distributed applications. It includes readings and case studies on network architecture for distributed applications and selected technologies to support enterprise systems. The emphasis of this course is on the application layer of the OSI model- the services that we offer on business networks.

Course Prerequisite: IS450. You can take a section of the hands-on course 451M (Microsoft OS), or U (Unix) to supplement this course.

Instructional Methods and the Classroom Experience: Lecture sessions will be interactive and aided by slide presentations. You are expected to participate, ask questions or present comments any time during the lecture. You are expected to review the reading material before the class so you can answer any questions presented by the instructor.

Course Requirements:
- Students are required to attend all lectures and be responsible for everything discussed and presented in class.
- Students should check the Announcements, Syllabus and Schedule, and Course Materials sections frequently for updates on the course and posting of new documents.

Course Materials: There is no required textbook for this course. All course materials are online on the course Blackboard site (to be checked by the students **regularly** for announcements and course materials).

Course Assignments: All homework assignments will be posted on BlackBoard before their assigned date. Students are expected to submit all completed homework assignments for grading before the start of the next class. Refer to the Course Schedule below for more information.

Attendance: Students are expected to be present and arrive on time for all lectures. Students are not permitted to using personal technology during class time. This includes, but is not limited to, laptops, desktops, tablets, smartphones, radios, etc. Students are not permitted to record lectures unless approved, in writing, in advance by the professor.

Grading:

Quizzes (5% each)	20%
Homework Assignments (2% each)	20%
Exams (30% each)	60%

Grades for the exams and quizzes, as well as final grades will be <u>posted</u> on the class Blackboard site.

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 after all numerical grades have been earned. At that point, numerical demarcations for final letter grades can be defined such that final letter grades in this course conform to the University's officially published definitions of the respective letter grades. 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. **In order to PASS the class, you must get a grade equivalent of "C" or better.**

Exams: If you miss an exam or quiz, you will receive a zero. Make-up exams are not given except for extenuating circumstances stated in the corresponding UMBC policy, such as conflicts, serious illness, etc. If an exam has to be missed, the student has to make the instructor aware of the special circumstance ahead of the exam. Written and unquestionable proof of the extenuating circumstances must be presented to be eligible for a make-up.

Quizzes: There will be unannounced quizzes throughout the semester given at the beginning of class. There will be NO make-up quizzes given. Quizzes will be graded and returned to be discussed in class.

Class Policies on Academic Integrity
Cheating in any form is not tolerated under any circumstance in accordance with the UMBC Academic Regulations. Any form of plagiarism, receiving inappropriate help in assignments or examinations, and providing inaccurate information concerning an excuse is treated as cheating,

and it is the instructor's responsibility to take the actions to the fullest extent of the regulations against the student violating the academic integrity rules.

Statement on Integrity:
"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."

Course evaluations

The IS department now uses online course evaluations. Students will be prompted via email to complete the online surveys at the end of each semester. Please make sure to fill them out.

Course Schedule:

Lecture Date	Lecture Topic	Homework Assignment Due
01/30/2017	Introductions, Application Layer and Protocols	NONE
02/06/2017	Large Scale Network Design – Part I	HW#1
02/13/2017	Large Scale Network Design – Part II	NONE
02/20/2017	Network Management & SNMP	HW#2
02/27/2017	OIT Tour (Tentative)	HW#3
03/06/2017	Exam #1 Review	HW#4
03/13/2017	Exam #1	HW#5
03/20/2017	SPRING BREAK – No Class	NONE
03/27/2017	Directory Services	NONE
04/03/2017	Multimedia Networking	HW#
04/10/2017	Caching/Content Delivery Networks	HW#7
04/17/2017	Storage Networking	HW#8
04/24/2017	Virtualization	HW#9
05/01/2017	Cloud Computing	HW#10
05/08/2017	Exam #2 Review & Course Wrap Up	HW#11
05/15/2017	Exam #2	

Diminished mental health can interfere with optimal academic performance. The source of symptoms might be related to your course work; if so, please speak with me. However, problems with other parts of your life can also contribute to decreased academic performance. UMBC provides cost-free and confidential mental health services through the Counseling Center to help you manage personal challenges that threaten your personal or academic well-being.

Remember, getting help is a smart and courageous thing to do -- for yourself and for those who care about you. For more resources get the Just in Case mental

health resources Mobile and Web App. This app can be accessed by clicking:
http://counseling.umbc.edu/justincase

The UMBC Counseling Center is in the Student Development & Success Center (between Chesapeake and Susquehanna Halls). Phone: 410-455-2472. Hours: Monday-Friday 8:30am-5:00pm.