

MIS 4700 - Advanced Networking

General Information

Professor:	Dr. Norman Garrett, LH 4024, phone 581-2228 Office hours: MW 9:00-9:30, 11:00-noon, F 9:00-10:00, or by appointment Email: nagarrett@eiu.edu
Course:	MIS 4700, Advanced Networking
Semester:	Fall, 2011
Course Website:	http://eiu.ngarrett.org
Methods:	Lecture, discussion, small group work, interactive online activities
Class Meetings:	MWF, 8:00-8:50 a.m., Lumpkin Hall 1040

Course Information

Catalog Description:	(3-0-3) F. Internetworking concepts, advanced internetwork design, security, and administration. Enterprise network design, management and user administration. WAN data analysis and troubleshooting.
Prerequisites:	MIS 3200 and admission to the School of Business or to a minor offered by the School of Business or permission of the Chair, School of Business.

Required Texts and Materials

Required Texts:	<i>Fundamentals of Wireless Networking</i> by Ron Price <i>Guide to TCP/IP (Second Edition)</i> by Laura Chappell & Ed Tittel
Required Materials:	TurningPoint is the EIU campus standard for student response systems. As part of this class students are required to purchase a TurningPoint keypad from the University Union Bookstore. The purpose of this keypad is to allow me to integrate responses with PowerPoint in order to do class polling, take attendance, get feedback about what is being discussed, and conduct testing. Please be sure to register your keypad when you purchase it and register your keypad in WebCT CE8. Keypads will be required beginning with the third week of class (September 7 th).
Course Website:	http://eiu.ngarrett.org . Students are responsible for any course-related material posted to this page and should check it daily. In addition, WebCT will be used extensively for this course and it should also be checked daily.
Correspondence:	All course-related correspondence should take place via WebCT. Non-course-related correspondence can be directed to me via regular email (nagarrett@eiu.edu)

Course Objectives

Upon completion of the course, the student will be able to:

- Describe enterprise and metropolitan area networks

- Describe wide area networks and how they integrate with local, enterprise, and metropolitan area networks
- Analyze the unique components of enterprise networks and integrate into the enterprise business model
- Define middleware and understand its role in enterprise networking
- Design enterprise networks
- Configure a router for internetworking
- Configure and administer Internet servers, including web servers, mail servers, DNS servers, FTP servers, news servers, and others
- Configure and administer security services for TCP/IP networks
- Administer TCP/IP network IP addresses and analyze the various alternatives for IP management, including subnetting, supernetting, DHCP, and other address pooling schemes
- Locate, interpret, and apply the various RFC documents that govern the Internet and key Internet functions

Online Access

We will use our course area in WebCT extensively, so you should arrange to have a computer available with Internet access. You will also need a user ID issued by Information Technology Services. In addition, we will extensively use other Internet technologies that will require daily access to the Internet.

Instructor and Campus Assistance

You may see me during my office hours with no appointment necessary. If you wish to see me at another time, please make an appointment by calling me at 581-2228, sending me an email in WebCT, or seeing me after class to make arrangements. Appropriate academic support is available for students with a documented disability. Please notify me and contact the Office of Disability Services (581-6583) for further information.

You can also obtain assistance from a variety of campus sources including the following:

Career Services (<http://www.eiu.edu/~careers>), 581-2412
 Counseling Center (<http://www.eiu.edu/~counsctr>), 581-3413
 Student Success Center (<http://www.eiu.edu/~success>), 581-6696

Grading

Exams

There will be 4 exams and a (non-comprehensive) final. The exams will be worth 100 points each and the final exam will be worth 200, as it covers more material. Exams are generally 30-35 multiple choice questions and have a time limit of 30 minutes.

Projects

There will be 10 projects worth 50 points each.

Issues

Students will be required to write 5 short papers (2-3 pages) on selected issues. These papers will be valued at 100 points each.

Quizzes

Occasional pop (no-notice) quizzes will be administered at the beginning of class. These quizzes are not required, but are valued at 25 extra credit points each and are designed to reward those who both read the assigned material and attend class. There is no makeup for these quizzes. Each quiz must be taken when administered, which will always be at the beginning of a class period. *This is the only extra credit that will be available in this course.*

Attendance and Participation

Attendance is recorded via use of the TurningPoint clickers. You will not do well in this course if you do not attend ALL class sessions and participate in class sessions and discussion. For further information, see the *General Policies / Attendance* section.

Grade Calculation

Grades will be calculated by dividing the points amassed by the number possible. The resulting percentage will be assigned a grade based on the following scale:

90% or better	A
80-89%	B
70-79%	C
60-69%	D

Points possible may vary, but tentatively they will be as follows:

Exams (4)	400
Final Exam	200
Projects (10)	500
Issues (5)	500
Total	1,600 points possible

General Policies

Attendance

In accordance with University policy, students are expected to attend class unless prevented by illness, an official University activity, or an emergency. Students who miss class due to an excused absence will be

allowed to make up missed work or submit assignments without penalty. An absence from class will be considered an “excused absence” under the following circumstances:

- *Absence due to illness:* An absence due to illness is excused ONLY if the student notifies the instructor of the absence in advance *and* provides documentation of the illness upon return to class.
- *Absence due to an official University activity:* Absence due to an official University activity is an excused absence only if the student notifies the professor of the absence in advance *and* provides written documentation of the University activity from an appropriate University representative prior to the absence.
- *Absence due to emergency:* Evaluation of whether an absence due to emergency is an excused absence will be made by the professor on a case by case basis. At a minimum, the student should notify the professor of the absence as soon as possible and should provide documentation of the emergency.

Makeup

Makeup of exams will be allowed only due to an excused absence for emergency or serious illness, as outlined above. Students who are excused from class due to participation in official activities, must make arrangements to take the exam **prior** to the absence.

Due Dates

All due dates are noted on the course calendar. You are responsible to make sure that your assignments are turned in on time. **Late assignments will not be accepted!** Assignments are due at the beginning of the class period where a due date is shown. For homework and other assignments not shown on the calendar, the due date will be that announced in class when the assignment is given. Once assignments have been collected, or submitted in electronic form, no assignments will be accepted for credit. Learn to do things completely and on time.

Academic Integrity

All students are expected to comply with University rules and regulations on academic integrity and honesty. These rules and regulations are summarized in the Student Conduct Code (<http://www.eiu.edu/~judicial>). Disciplinary sanctions may be imposed for violations of these rules and regulations.

To encourage original and authentic written work, students may be required to submit their written assignments in this course for review to Turnitin.com, or other systems designed to detect plagiarized material, and those assignments will become a searchable document with the Turnitin (or other system's) database.

Course Calendar

Each class day will consist of lectures on technical and managerial topics and class discussions. Some class time will be used for online preparation, discussion, and activities.

Assigned reading should be done *before* coming to class. We do not have time to cover all of the material in your texts so, as an upper-division student, you should examine the material thoroughly on your own. You should come to class prepared for topical discussions. The course calendar lists the reading assignments and the topics to be dealt with during our class time.

The course calendar is tentative and is subject to change by the professor. Any changes will be announced in class and posted on WebCT or course web site. Students are responsible for complying with changes announced in class.

Emergencies

Instructions about what to do in the event of an emergency are posted in all classrooms on Eastern's campus. Students are responsible for acquainting themselves as to the specific instructions so that they will be prepared in the event of an emergency.

Use of Cell Phones and Computers

The use of cell phones, pagers, PDAs, or similar communication devices, during scheduled classes and examinations is prohibited. All such devices must be turned off or put in a silent mode and ordinarily should not be taken out during class. Given the fact that these same communication devices are part of the University's emergency notification system, an exception to this policy would occur when numerous devices activate simultaneously. When this occurs, students may consult their devices to determine if a university emergency exists. If that is not the case, the devices should be immediately returned to silent mode and put away. Other exceptions to this policy may be granted at the discretion of the instructor.

Students may use laptops during class to access PowerPoint lecture notes and/or take notes. Accessing the Internet, sending and receiving emails, etc., is NOT acceptable. Students who abuse the laptop privilege will be asked to keep their laptops stowed during class. Laptops may not be used during examinations. Occasionally, this policy may be altered by the instructor as needed for instructional purposes.

Professionalism

Students are expected to demonstrate professional conduct in class. Students who engage in unprofessional behavior (such as tardiness, sleeping, reading non-class materials, talking, text messaging, etc.) may be asked to leave the classroom for the duration of the class session.