

SYLLABUS

IT 263-520

Applied Networks and Security

Winter Quarter 2013

Instructor: Greg Brewster
Office: CDM 850
Office Hours: Thursdays 1:00 pm – 2:30 pm
Phone: (312) 362-6587 (voice) (312) 362-6116 (fax)
E-mail: gbrewster@cdm.depaul.edu
Web page: <https://d2l.depaul.edu>
Required Text: Applied Networking Labs, (Paperback) by Randy Boyle, Prentice Hall 2011.
Optional Text: The Internet Book: Everything You Need to Know About Computer Networking and How the Internet Works, (4th edition) (Paperback) by Douglas E Comer. 2006.

This course introduces the networking and security technologies required to set up and maintain small networks. Networking topics will include client/server application software configuration, network connectivity (cabling, switch and router configuration), basic IP addressing, network address translation and options for public Internet access services. Security topics will include typical threats and responses, firewalls, host hardening, password management and virtual private network (VPNs).

This is a fully online course. That is, there is no classroom and there are no physical class meetings. Course materials will be organized into six Content Modules. Each Content Module will have associated readings, notes, tutorials and video presentations for students to study to learn the course topics. Each Content Module then has three graded deliverables: an associated discussion forum, homework assignment and lab exercise. Schedules and due dates for module materials are on the next page. In addition, students will write a short paper. At the end of the course there will be a proctored comprehensive final exam.

Required coursework components and their contribution to the final grade will be:

- a) 6 discussion contributions (10%)
- b) 6 homework assignments (30%)
- c) 6 lab exercises (25%)
- d) 1 paper (15%)
- e) final exam (20%)

Further details on each assignment will be distributed in class. All assignments are due by 11:59 pm on the due date unless otherwise specified. The lowest score in Discussions, Homework and Labs will be dropped from the final grading. Assignments received late will be penalized as follows: up to 1 day late is 20% penalty; 1-2 days late is 30% penalty, 2-3 days late is 40% penalty, 3-7 days late is 50% penalty. No assignments will be accepted more than 7 days late. All assigned work must be completed individually. I expect all students to read and understand DePaul's policy on Academic Integrity

Course Module Schedule

	Module Name	Content Available	Discussion Due	Homework Due	Lab Due
1	Network Basics	Jan. 9	Jan. 15	Jan. 21	Jan. 24
2	Intro to Network Security	Jan. 16	Jan. 23	Jan. 28	Jan. 31
3	Ethernet Networks	Jan. 25	Jan. 30	Feb. 2	Feb. 7
4	TCP/IP Protocols	Feb. 4	Feb. 12	Feb. 18	Feb. 22
5	Elements of Security	Feb. 15	Feb. 25	Mar. 2	Mar. 5
6	Designing Secure Networks	Feb. 27	Mar. 6	Mar. 11	Mar. 14

All students will be notified by e-mail if any changes to this schedule are made. The Calendar tool on the course D2L web site will always show the most up-to-date schedule of course dates.

The paper will be due on Friday, March 8th. Paper assignment will be handed out in the 3rd week of the quarter.

The final exam will be taken during a time slot scheduled by each student during finals week. Exam scheduling and proctoring will be handled by the CDM OnLine Learning office. A comprehensive final exam review guide will be handed out and a live review session will be held during the first week of November.

Letter grades will be assigned according to the following grade scale based on the final course score percentage.

A = 90%-100%, A- = 88%-90%, B+ = 86%-88%, B = 80%-86%, B- = 78%-80%, C+ = 76%-78%, C = 70%-76%, C- = 68%-70%, D+ = 66%-68%, D = 60%-66%, F = 0-60%

This scale may be curved to the students' advantage (that is, grades may be higher than indicated), but these are minimum letter grade assignments.