

ITSY 2301 FIREWALLS & NETWORK SECURITY
Fall 2011

Instructor: Dr. Stuart S. Cook

Office Phone: 512.370.3233

Office: Room 004 (our classroom)

Office Hours: M/W 5:00 to 5:30 PM

E-mail/Web: scook@austincc.edu, www.austincc.edu/scook

Course Description: Identify elements of firewall design, types of security threats and responses to security attacks. Use best practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.

Pre-requisite: ITSY 1300.

Approved Course Text: REQUIRED: *Cisco ASA Configuration (Networking Professional's Library)* by Richard Deal, McGraw-Hill Osborne Media; 1 edition (June 5, 2009), ISBN-10: 0071622691

Methodology: Lecture, discussion, homework, lab. Course is setup on Blackboard.

Course Rational: Knowledge of the operation of firewalls is essential to the person who wants to ensure network security. The course looks at firewalls in general and the Cisco ASA 5500 Series firewall specifically.

Exams: There will be 4 exams as shown on the course schedule.

Labs: The lab assignments are an essential part of your learning experience. You cannot hope to learn the software without the hands-on experience. Accordingly, you are expected to be present in class and complete the lab assignments here. You will be given lab completion sheets for every lab and be expected to turn them in at the conclusion of the lab period. Because life often intrudes on our learning experience and in acknowledgement that various students complete labs at various paces, there is “make-up” lab time built into the schedule.

Homework: The instructor reserves the right to make additional assignments if needed.

Grades Final grade will be based 60% on exams and 30% on lab assessment and 10% on
Policy: other factors such as attendance and class participation.

Grade Scale: A = 90 – 100, B = 80 – 89, C = 70 – 79, D = 60 – 69, F = below 60

Course/Class Policies:

Attendance/ Students are expected to attend classes and will be held responsible for all
Withdrawal: material covered in class. Regular attendance helps ensure satisfactory progress towards completion of the course. It is the student's responsibility to complete a withdrawal form in the Admissions Office if they wish to withdraw from this class. The instructor may withdraw students from this class if their absences exceed 10% of the total number of class meetings. The last date to withdraw for this semester is November 17. It is not the responsibility of the instructor to withdraw the students from their class even though the instructor has the prerogative to do so under the above listed circumstances.

Incomplete: A student may receive a temporary grade of "I" (Incomplete) at the end of the semester only if ALL of the following conditions are satisfied:

- The student is unable to complete the course during the semester due to circumstances beyond their control.
- The student must have earned at least half of the grade points needed for a "C" by the end of the semester.
- The request for the grade must be made in person at the instructor's office and necessary documents completed.
- To remove an "I", the student must complete the course by two weeks before the end of the following semester. Failure to do so will result in the grade automatically reverting to an "F".

Academic Integrity: Acts prohibited by the college, for which discipline may be administered, are scholastic dishonesty (including but not limited to cheating on an exam or quiz), plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to, tests and quizzes (whether taken electronically or on paper); projects, (either individual or group); classroom presentations, and homework.

Freedom of Expression: It is expected that faculty and students will respect the views of others when expressed in classroom discussions.

Students with Disabilities Policy: Each ACC campus offers support services for students with documented physical or psychological disabilities. Students with disabilities must request reasonable accommodations through the Office for Students with Disabilities on the campus where they expect to take the majority of their classes. Students are encouraged to do this three weeks before the start of the semester. (Refer to the Current ACC Student Handbook.)

**Course Below
 Schedule**

Week	Date	Course Content
(1)	8/22	Course Introduction
	8/24	Firewall Basics
(2)	8/29	Basic Firewall Setup
	8/31	CLI Basics; Basic Firewall Setup
(3)	9/6	Labor Day Holiday – No Class
	9/7	Chapter 3 Lab
(4)	9/12	Chapter 4: Routing and Multicasting
	9/14	Chapter 4 Lab
(5)	9/19	Review; Test #1 (Chapters 1-4)
	9/21	Chapter 5: Address Translation
(6)	9/26	Chapter 5 Lab
	9/28	Chapter 6: Access Control
(7)	10/3	Chapter 6: Access Control

	10/5	Chapter 6: Lab
(8)	10/10	Chapter 5 -6 Review and Lab Catch-up
	10/12	Test #2 (Chapters 5 and 6)
(9)	10/17	Chapters 7-9
	10/19	Chapters 7-9 Continued
(10)	10/24	Chapters 7-9 Lab
	10/26	Chapter 10: Modular Policy Framework
(11)	10/31	Chapter 10 Continued
	11/2	Chapter 10 Lab
(12)	11/7	Review and Lab Catch-up
	11/9	Test #3 (Chapters 7-10)
(13)	11/14	Chapters 11-14 (Selected material): Protocols and Policies
	11/16	Chapters 11-14 Lab
(14)	11/21	Chapters 15-16: VPN Part 1
	11/24	Thanksgiving Holiday – No Class
(15)	11/28	Chapters 15-16 Lab
	11/30	Chapter 19: SSL VPN and Lab
(15)	12/5	Review and Lab Catch-up
	12/7	Final Exam