

Cabrillo College

Syllabus: CIS 83 – Fall 2009

Gerlinde Brady Phone:

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Class Meetings: Monday 5:30 pm – 9:35 pm

Office: Room 2552

**Office Hours: M 9:30 -10:00 (room 2552); T 1:05 – 1:35 pm, W 12:25 -12:55, TH
10:00 – 10:30**

E-mail: [gebrady at cabrillo.edu](mailto:gebrady@cabrillo.edu)

Web: <http://www.cabrillo.edu/~gbrady>

Course Description

This course combines semesters three and four of the Cisco Networking Academy CCNA curriculum and covers basic switching concepts, security threats, wireless network concepts and terminology, LAN segmentation, network congestion issues, VLANs, VTP, Inter-VLAN routing, network troubleshooting, access control lists, and the operation of the Spanning Tree protocol. This course also covers the various Wide Area Network services including Frame Relay, HDLC, PPP, teleworker services, and IP addressing services. This class includes extensive hands-on experience using Cisco equipment. The concepts covered in this course are general networking concepts that are not specific to Cisco equipment.

Course Format

Class sessions will include instructor-led presentations and discussions, collaborative exercises, student research, interactive group work, and extensive hands-on lab exercises. Classes are from 5:30 pm – 9:35 pm. You are expected to spend 5 hours and 2 minutes working on class materials.

Course Book

There is no required text book for this class.

Recommended books:

- Lewis, Wayne , Ph.D. LAN Switching and Wireless CCNA Exploration Companion Guide. 1st Ed., Cisco Press: 2008.(ISBN-10: 1-58713-207-9; ISBN-13: 978-1-58713-207-0).
- Graziani, Rick, and Vachon, Bob. Accessing the WAN CCNA Exploration Companion Guide. 1st ed. Cisco Press: 2008. (ISBN-10: 1-58713-205-2; ISBN-13: 978-1-58713-205-6).
- Lammle, Todd. CCNA: Cisco Certified Network Associate Study Guide: Exam 640-802, 6th Edition
- Doyle, Jeff. Routing TCP/IP, Volume I. 2nd Ed. Cisco Press: 2005

Requirements/Prerequisites

CIS 81 is a prerequisite course for CIS 83. Students will need the knowledge and skills from CIS 81 to be successful in the class. Some of the knowledge and skills you need are:

- internet research skills
- file management
- use of command line interface
- knowledge of TCP/IP protocols and their functions
- knowledge if IPv4 addressing
- TCP/IP basics (OSI model)
- Communication skills (oral and written)

To be successful in the class, you need to be prepared. Complete each week's work and reading assignments ahead of time. You are expected to attend all class sessions and participate actively in collaborative tasks. Work your way through the assigned readings.

Do as many of the lab assignments as you need to do to feel comfortable with the material. If you feel overwhelmed or fall behind in the class, get help immediately. Many students benefit from individual tutors. See the Tutorial Center for information regarding tutors. Study in groups. Help each other. Please talk to me if you need help. If you have to miss class due to illness or other responsibilities, please contact me ahead of time to make arrangements.

The amount of time you need to spend outside of class to be successful depends on your previous experience, your work habits, and your learning style.

Hours by Arrangements

The Cabrillo schedule of classes lists open lab times for you to complete your assignments and practice new skills of "+5 hr 10 min open lab per week". These open lab hours are at times of your choosing in the networking lab (room 2504). The networking lab is open as shown here: [Networking/CIS Lab hours](#). It is the student's responsibility to make use of these available hours every week. You will need to sign in and out when you use the lab.

Grading Policy

By default, students will receive a letter grade (A – F) in this class. The class may be taken on a pass/no pass basis. The equivalent to the letter grades A, B or C will result in a *pass*, the equivalent to a D or F will result in a *no pass*, so students will need to turn in assignments and take exams. It will **NOT** be possible to change from a letter grade to a pass/no pass after the deadline. Please refer to the Cabrillo schedule of classes for the

deadline date. Final course grades will be calculated according to the following weighting system:

Lab Exercises	20%
Reading Quizzes	20%
Midterm	20%
Case Studies/Portfolio	20%
Final	20%

Final Grade	
100% – 90%	A
89% – 80%	B
79% – 70%	C
69% - 60%	D
59% below	F

“Incomplete” Grade Policy

A grade of “I” can only be assigned if serious extenuating circumstances prevent you from completing the coursework by the deadlines. To request an “I”, you must have completed 75% of the required course work and you must make this request well in advance of the final day of classes. A grade of “I” is not automatic; it must be arranged by mutual agreement. In general, it should be removed before the start of the following semester. I very strongly discourage students from requesting an “Incomplete” grade.

Student Learning Outcomes

1. Describe and analyze the advantages of LAN segmentation in general and LAN segmentation using bridges, routers, and switches.
2. Configure VLANs.

3. Describe and analyze network congestion problems in an Ethernet network.
4. Explain the Spanning Tree Protocol.
5. Describe and explain the benefits of virtual LANs.
6. Analyze and differentiate between different WAN services: PPP, HDLC, and Frame Relay.
7. Configure WAN services on Cisco routers.

Late Assignments

There will be a number of hands-on lab exercises to help you practice new skills and deepen your understanding of the material. You are responsible for getting all assignments from the class Web site at <http://www.cabrillo.edu/~gbrady> and/or Blackboard. You might want to print assignments out before coming to class when applicable. Paper copies will not be handed out.

Late assignments can only be accepted due to illness, family emergency, or other legitimate reasons beyond your control. Assignments that are turned in late will receive a 10% point deduction for each day the assignment is overdue, unless you negotiated an extension in advance. Assignments submitted more than 7 days late cannot be accepted and receive a score of zero points.

Classroom Etiquette/Housekeeping

- Pagers and cell phones need to be turned off or set to vibrate mode during class.
- Please show courtesy to the class by restricting conversation to in-class topics.

- The computers in the classroom need to remain powered down during lecture time unless otherwise specified.
- Please do not download anything unless asked to do so by your instructor.

Passwords

You will have to keep track of a number of passwords. Please record them in the table below, so that you will be able to refer to your records when you need to use your password and cannot remember it. In the "real world" you would not write down you password, because it is not secure.

Site	Username	Password
CTC (1400 building)/Campus		
Blackboard		
Cabrillo College Netacad Server	c	
NetLab		
Cisco Community Server		

Drop

If you need to drop the class, it is your responsibility to take the required steps. Please do not assume that I will automatically drop you if you stop coming to class. If a class is not dropped properly, you might receive an "F" on your transcript. The Cabrillo College Web site lists all the important due dates.

Special Needs

I encourage students with disabilities, including "invisible" disabilities such as chronic diseases, learning, and psychological disabilities, to explain their needs and appropriate accommodations to me during my office hour. Please bring a verification of your disability from the Learning Skills or DSP&S offices and a counselor's or specialist's recommendations for accommodating your needs.

As required by the Americans with Disabilities Act (ADA) accommodations are provided to ensure equal opportunity for students with verified disabilities. If you have a disability that requires accommodations for this class, please contact the Learning Skills Program at 479- 6220 (for students with learning disabilities and attention deficit disorders) or Disabled Student Services & Programs (DSP&S): 479-6379 to make arrangements as soon as possible.