CS285: Network Defense Security: Spring 2019

(Last update: 30 Mar 2019)

4 Credits, Grading: A-F, 02 Apr - 11 Jun, Networking Lab: MKH-105

CRN: 42480 Time: TR 1000-1320

#### [Instructor: Parker Swanson](http://cf.linnbenton.edu/bcs/cs/swansop/web.cfm?pgID=258)

Cisco Networking Academy Advanced Level Instructor®  
Cisco Networking Academy CCNA Security Instructor®

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Course Objectives: Catalog Description:  
This course provides an introduction to the core security concepts and skills needed for the installation, troubleshooting and monitoring of network devices to maintain the integrity, confidentiality, and availability of data and devices. It helps prepare students for entry-level security career opportunities and the globally recognized Cisco CCNA Security certification. The National Security Agency (NSA) and the Committee on National Security Systems (CNSS) recognizes that Cisco CCNA Security certification courseware meets the CNSS 4011 training standard. By being compliant, the Cisco CCNA Security course and certification program provides the required training for network security professionals who assist federal agencies and private sector entities to protect their information and aid in the defense of the nation’s vital information resources. This course is a hands-on, lab-oriented curriculum with an emphasis on practical experience to help students develop specialized security skills, along with critical thinking and complex problem solving skills. Students who enroll in Network Defensive Security are expected to have fundamental router/switching level networking knowledge and skills, along with basic PC and internet navigation understanding.

Prerequisites:  
CIS 151 Networking Essentials  
CIS 152 Router Configurations  
CS 284 Computer Security & Information Assurance   
all with a “C” or better  
and with a "Pass" recorded in the Cisco Networking Academy® global database.

Textbook "required" (actually, just warmly recommended):

* CCNA Security (210-260) Portable Command Guide (2nd Edition)
* (note: this syllabus originally referred to the 1st edition, which is going extinct)
* By Bob Vashon
* ISBN 9781587205750
* Listing for $25 at Amazon (for example)
* Note that all curriculum materials, including lab instructions, are available on line via your Cisco Networking Academy NetSpace login.

Internet:

We will use the Internet extensively to search out background information and to answer our questions. Students are expected to be experts at digging information from the 'Net, and there will be plenty of opportunities to practice this skill.

Assignments:

On-line Cisco Networking Academy Curriculum: At the core of this class is the Cisco on-line curriculum. Each student will have his/her own account on the Cisco Networking Academy Server which will allow each of you to access the course via any internet connected computer at: [netacad.com](http://netacad.com/)

Lab Work:

Lab exercises and Packet Tracer exercises will be assigned via the Calendar on the NetSpace Website. Lab exercises must be done in class during lab time. Packet Tracer simulation exercises can be done either in class during lab time or, preferably, outside of class. You will upload the results of your lab work will to the place for the assignment on our NetSpace website. Your results will include the questions and answers provided by NetAcad (.docx and .pdf files for your fill-in editing are available in the Files folder on the website). You will also upload the final config files of all devices you configure. Your work should be turned in by the date specified in the Assignment on the NetSpace course calendar. Packet Tracer exercises (just the .pka file) will also be uploaded.

A general note about how we'll do our CS285 labs:

* All labs must be completed here in our network lab, using our lab equipment.
* You should work in groups of up to 3.
* You are required to upload the final running configurations for all devices you configure. These are what I pay most attention to when evaluating your work. If you are "rusty" about how to capture the results of a #show run command in the terminal, I will help you remember.

Tests:

"Chapter" (i.e. pre-Final) Tests: "Chapter tests" (which includes the PreTest and the Practice Final Exam) will be assigned via the Calendar on the NetSpace website. They will be accessed via the Internet from the Cisco Networking Academy "NetSpace" Website. You will take all your CS285 chapter tests (including the pretest and practice final - in fact, all tests except the final exam) outside of class, on your own time. Of course there can't be any restrictions on "open book" etc. with that arrangement. You'll be able to take each test several times (in theory, up to 10 times). You should be able to see all available "feedback" on the questions. The NetAcad database will record your last score, so of course try to improve! :-)  Typically, the tests will be enabled from 1400 Thu until 0800 Tue.

Important Note: "Log in early and often!" YOU are responsible for getting ahold of a reliable Internet connection to the NetAcad assessment server, etc. If you're in any doubt, take the exams from on-campus at LBCC!! Since the exams will each be enabled for several days, and you will have the opportunity to take each exam several times, I can't promise an opportuntiy for retakes of any exam after its enabled period. All exam scores will be counted, i.e. no  exam grade will be dropped from your average.

Final Skills-Based Assessment:

The Final Skills-Based Assessment is an important part of the Academy assessment program. The standards of the Cisco Networking Academy are such that a passing score on the Final Skills-Based Assessment (to be announced, typically 70%) must be obtained in order to pass the Academy Course.   
  
Final Exam:

The Final Exam will be given 0930-1120 PDT Tue 11 Jun 2019 in MKH-105. If you do not pass the final exam on your first attempt, you will be permitted to take it again the next day. However, in that case the highest possible grade that you will receive in the class will be a C regardless of your total percentage level.

The following scale (tentative) will be used to determine your grade in this course:

|  |
| --- |
| Assessment Scale:  Lab Work = 50%  Chapter Tests = 15%  Final Skills-Based Assessment = 10%  Final Exam = 25%  Grading Scale:  A = 90-100%  B = 80-89%  C = 70-79% |

 Class attendance:

For legal reasons, LBCC instructors are advised to keep track of students' attendance in class. In addition to considerations of Class Participation, this is made necessary by the fact that some Student Financial Aid programs require class attendance. Instructors do not know which students may be enrolled in such Financial Aid Programs until the end of the term, at which time attendance information may be required. So the best policy, which will be followed in this course, is for the instructor to take attendance at each class meeting.

In addition, Cisco requires that the instructor certify a student's satisfactory attendance in order to pass the course. Your attendance is expected to be sufficient in time and in quality to complete all the assigned work and learn all assigned material thoroughly.

If you have any questions about required attendance, ask the instructor!

Online Discussion:   
The NetSpace course website includes the capability of Discussion threads. These will be started whenever appropriate.Their  purposeis to facilitate contact among students and with the instructor, "24/7". If you see a question posted by another student, feel free to contribute constructively to the discussion. The instructor will try to monitor the Discussion threads and respond to questions.

Academic Honesty Policy:   
All students are encouraged to discuss assignments and course materials in general terms with other students. If you need help with the exercises, you are encouraged to ask the instructor. Please note, however, that the work you turn in to be graded must be your own work. Representing another person's work as your own constitutes academic fraud, and has no place at LBCC. No credit will be given for assignments which, in the instructor's judgement, were not created by the student submitting them.

Skills required for success in this course:

1. Time management: The ability to plan ahead, start assignments early, ask for needed help early, and submit assignments according to specifications and on time.
2. Patience: The ability to look calmly at a problem, analyze how to solve it, and concentrate on its solution.
3. Skill in analytical and logical problem-solving: A genuine liking for solving puzzles, and satisfaction in having done your best work to produce a solution.
4. A sense of humor: Working with computers humbles a person every day. Learn not to take it personally!

Note about cell phones in class:  
Please set your cell phone ringer to "Vibrate Only" mode (or turn it off) before you enter the classroom. If you need to answer or place a call, please step outside the classroom while you do so.

### LBCC standard statement for students with disabilities:

## You should meet with your instructor during the first week of class if:

## You have a documented disability and need accommodations.

## Your instructor needs to know medical information about you.

## You need special arrangements in the event of an emergency.

If you have documented your disability, remember that you must make your request for accommodations through the Center for Accessibility Resources (CFAR) [Online Services webpage](https://cascade.accessiblelearning.com/LBCC/) every term in order to receive accommodations. If you believe you may need accommodations but are not yet registered with CFAR, please visit the [CFAR Website](http://www.linnbenton.edu/cfar) for steps on how to apply for services or call 541-917-4789.