**CS 285: Network Defense Security: Spring 2020**

*(Last update: Jan 23, 2020)*

**4 Credits, Grading: A-F, Mar 30 – June 12, Networking Lab MKH-105**

**CRN: 42480 Section 1 Time: TR 10:00-1:20**

[Instructor: Ziko Rizk (Links to an external site.)Links to an external site.](http://cf.linnbenton.edu/bcs/cs/rizkz/web.cfm?pgID=8473)

**How to contact me:**

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**Course Objectives:**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.

**Prerequisite:**
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 suggested: The following book should be available the LBCC bookstore:**

**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:[**http://cisco.netacad.net (Links to an external site.)Links to an external site.**](http://cisco.netacad.net/)

**Labs:**

**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 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.*

**Exams:**

**Chapter Exams (which includes the course Pre-Test) 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 Chapter CIS153 tests 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! :-)  All tests will be enabled after class on the day we discuss the material in class, and will remain enabled until 11:59 pm on Sunday.

***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. However, your lowest exam grade (including all the assigned Chapter exams, PreTest exam, and Practice Final exam) will be dropped from your average.***

***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 June 9, 2020 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:

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| **Assessment Scale:****Labs = 50% of course credit****Non-Final Exams = 15% of course credit****Skills-Based Assessment = 10% of course credit****Final Exam = 25% of course credit****Provisional Grading Scale:****A = 90-100%****B = 80-89%****C = 70-79%** |

**Instructor and Student Responsibilities:**

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| **Instructor Responsibilities** | **Student Responsibilities** |
| I commit to starting all classes on time. | You agree to attend all classes and to comply with college code of conduct. |
| I commit to showing up to class prepared. | You agree to actively participate in class discussions and exercises. |
| I commit to balancing class time between lecture and hands-on exercises. | You agree to spend an average of 4 hours per week on readings and assignments outside of class (see Moodle for details). |
| I commit to holding published office hours. | You agree to complete all readings and course assignments on time (due on Sunday night). |
| I commit to responding to your email within 24 hours (no voice mail please). | You agree to collaborate professionally with fellow students on the class project. |
| I commit to grading assignments within 3 days (after due date). |  |
| If I'm unable to come to a class, I commit to doing my best to find a substitute instructor while keeping you up-to-date. |  |

**Academic Honesty:**

Helping, or being helped by, another student during an exam will be considered a breach of academic honesty and is grounds for receiving a zero grade and/or failing the course among other possible remedies.

**Classroom Conduct:**

1. Please silence cell phones and do not use during class.
2. Please do not bring other electronic devices to class including laptops, iPods, iPads, etc.
3. No food or drink in the classroom.
4. Please respect the learning environment of others and keep distractions to a minimum.
5. **Time management**: The ability to plan ahead, start assignments early, ask for needed help early, and submit assignments according to specifications and on time.
6. **Patience**: The ability to look calmly at a problem, analyze how to solve it, and concentrate on its solution.
7. **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.
8. **A sense of humor**: Working with computers humbles a person every day. Learn not to take it personally!

**LBCC Center for Accessibility Resources:**

Students who may need accommodations due to documented disabilities, or who have medical information which the instructor should know, or who need special arrangements in an emergency, should speak with the instructor during the first week of class. If you believe you may need accommodations, but are not yet registered with CFAR, please go to <http://linnbenton.edu/cfar> for steps on how to apply for services or call 541-917-4789.

**LBCC Comprehensive Statement of Nondiscrimination:**

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws.

**LBCC Statement of Inclusion:**

The LBCC community is enriched by diversity. Each individual has worth and makes contributions to create that diversity at the college. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill (related to Board Policy #1015).

**Basic Needs Statement:**

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Roadrunner Resource Center for support (resources@linnbenton.edu , or visit us on the web [www.linnbenton.edu/RRC](http://www.linnbenton.edu/RRC)  under Student Support for Current Students). Our office can help students get connected to resources to help. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.