CIS 152: Routing & Switching Essentials: Winter 2019

(Last update: 12 Dec 2018)

4 Credits, Grading: A-F, 07 Jan - 18 Mar, Networking Lab MKH-105

CRN: 31856 Time: MW 1230-1550

Cisco Networking Academy course designation:
CCNA R&S: Routing and Switching Essentials, Version 6.00

#### [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®
Cisco Networking Academy CCNA CyberOps Instructor®

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Course Objectives:
The second course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate (CCNA) certification. Empasizes experience in current networking technology, and includes network terminology and protocols. Topics include LANs, network topology, IP addressing, routers, router programming, and application of routing and router protocols.
CIS152 is the second Networking course in LBCC's Network and Systems Administration Associate of Applied Science degree program, and in LBCC's Certificate in Basic Networking program.

Prerequisite:
CIS 151 Introduction to Networking, with a minimum "C" grade
and with a "Pass" recorded in the Cisco Networking Academy® global database.

The CCNA Program at LBCC:
Fall term: CIS151 (4 units)
Winter term: CIS152 (4 units)
Spring term: CIS153 (4 units)
Fall term second year: CIS154 (4 units)

Textbook suggested: The following book should be available the LBCC bookstore:

* CCNA Routing and Switching Portable Command Guide, 4th Edition
* By Scott Empson
* Published by Cisco Press
* ISBN 978-1-58720-588-0

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](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. The results of your lab work will be recorded on pages from the On-Line curriculum which you print out. The work is to be turned in by the date specified in the Assignment on the NetSpace course calendar. Packet Tracer exercises and other exercises in electronic format will be uploaded to the appropriate Assignment on the NetSpace website. As repeatedly pointed out in the Cisco curriculum: Simulators such as Packet Tracer aren't in any way a substitute for our hands-on work with real networking hardware - but they can be a useful part of your learning toolkit.

Exams:

Non-Final tests (which includes the course Pre-Test 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 Non-Final CIS152 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 0900 the following Monday, unless we have a Monday holiday in which case they will remain enabled until 0900 the following Wednesday.

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 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 Skills-Based Assessment (to be announced, typically 70%) must be obtained in order to pass the Academy Course and be approved for advancement to the next term of the CCNA curriculum (at LBCC: course CIS153, to be offered Spring 2019).

Final Exam:

The Final Exam will be given on Mon 18 Mar 1300-1450 in MKH-105. It is "closed-book"; no aids of any kind such as Internet sites, written notes, conversations, etc. are permitted.  You are required to pass the final exam in order to pass the course and be approved for advancement to the next term of the CCNA curriculum – CIS 153. If you do not pass the final exam on your first attempt, you will be permitted to take it again a day or two later. 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 creditNon-Final Exams = 15% of course creditSkills-Based Assessment = 10% of course creditFinal Exam = 25% of course creditProvisional Grading Scale:A = 90-100%B = 80-89%C = 70-79% |

The following policy is standard in the LBCC Computer Systems Department:

* "Incomplete" grades:"If a student has satisfactorily completed most of the course work, but has encountered an emergency which, in the instructor's judgment, is sufficiently serious, the instructor will prepare an Incomplete Agreement specifying the work that the student needs to complete, by the end of the following term, to earn the remaining credit for the course. The Agreement will specify a default grade based on the work which the student has completed to date. In case the student does not fulfill the Agreement, the default grade will automatically be assigned at the end of the following term."

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!

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.

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

1. You have a documented disability and need accommodations.
2. Your instructor needs to know medical information about you.
3. 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://linnbenton.edu/cfar) for steps on how to apply for services or call 541-917-4789.