CS284: Computer Security / Information Assurance





Winter 2019 Course Syllabus:

(Last update: 16 Dec 2018)

CRN: 32150

Section: 01 - Evenings

Time: Tues & Thurs 1700-1920

Credits: 4 Grading: A-F

8 Jan – 19 Mar 2019

Classroom & Lab: MKH-105

Instructor: Mark Cantrell

How to contact me:

1. mailto:cantrem@linnbenton.edu - Include CS284 on subject line!

2. Office: (by appointment)

3. Office phone: (unattended – please use e-mail)

Course Description:

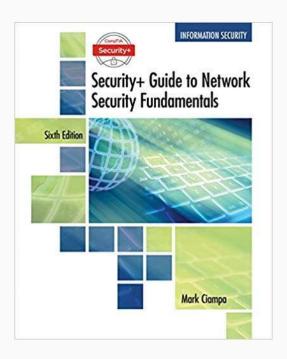
This introductory course surveys fundamental principles and modern topics in computer security. It covers privacy concerns, policies & procedures, hardware security, software security, network security, and data security. Multi-level security, Public Key Infrastructure (PKI) and access control are also discussed, along with an basic introduction to cryptography technologies. Lab activities at the end of each class session reinforce topics from the textbook. CS284 may be taken as part of a student's preparation for the CompTIA Security+ certification exam.

Important Note: Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the **CFAR Website** for steps on how to apply for services or call 541-917-4789.

Prerequisites:

- 1. MTH-095 Intermediate Algebra with a minimum "C" grade.
- 2. CS-160 Orientation to Computer Science with a minimum "C" grade.

Required Textbook:



Title: Security+ Guide to Network Security Fundamentals 6th Edition

Author Ciampa

ISBN: 9781337288781

Status: Available in Bookstore

Internet:

We will use the Internet *extensively* to search out background information, to answer questions, and to complete & submit lab assignments.

Assignments:

The only graded assignments will be lab results consisting of documents to be submitted via the Internet at the end of each class session. Students are also expected to read the designated chapter from the text prior to each class/lab session. The chapters average approximately 40 pages in length.

Lab Work:

Specifics of assigned lab exercises will be posted on the course site, with additional details announced in class. For credit the results of each lab will be submitted to the

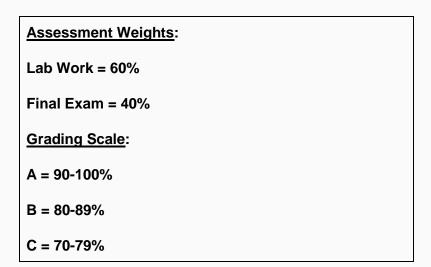
instructor in electronic format, using web based forms on the web-based course site. Note that lab assignments, both hands-on and simulated, are a vital part of your preparation for any certification exam or employment in the security field. They are also the best way to deepen your understanding of, and lastingly imprint, the concepts explained in the text. Accordingly, the lab work is very heavily weighted in the final grade.

Final Exam:

The Final Exam will be in the regular classroom, at the time and place specified in the course schedule (i.e. during the regular scheduled class time on Tuesday, 10 June). This final comprehensive exam is the only written exam for the course, and will be based entirely on the text. It will be very similar in content and difficulty level to the Review Questions at the end of each chapter in the text. Students are therefore strongly encouraged to answer Chapter Review questions on their own as they read the text (even though review questions they will not be collected or graded).

Course Grades:

The following weights and scale will be used to determine your overall grade in this course:



The following policies regarding "Y" and "Incomplete" grades have been standardized in the LBCC Computer Systems Department:

"Y" grades: "It is the responsibility of the student to withdraw from the
course if they do not wish to receive a letter grade. The last day to
withdraw is listed in the current schedule of classes. There will be no "Y"
grades given for this course."

"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:

Class attendance is vital. Most class sessions will include graded events, important announcements, and/or a discussion of topics that may be difficult to grasp from the reading the text alone. Many Student Financial Aid programs also require class attendance. Accordingly, if you cannot attend a particular class session, you are responsible for arranging with the instructor to complete missed work on your own time. Note that some in-class events, such as the hands-on labs, may be very difficult to reschedule or simulate outside of class. So please minimize absences, and coordinate any unavoidable absences <u>in advance</u> with the instructor in order to minimize the impact on your grade.

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 labs or course concepts, you are encouraged to ask the instructor. However, every student is expected to independently complete all graded assignments. 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 judgment, were not created by the student submitting them. In addition, academic dishonesty is grounds for failing a course, or other disciplinary action (including suspension or expulsion) as described in the LBCC Student Standards of Conduct.

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. Above all, <u>please keep up with the course schedule!</u> If you get too far behind, it may not be feasible to catch up. All-nighters won't work.
- 2. A sense of **humor**.

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.