

COMPUTER INFORMATION SYSTEMS 27B

Ethical Hacking

Class Code: 43515

Term: Spring 2022

When: TH 9:35 AM – 11:00 AM

Where: Business Education 104

Instructor: Skip Berry

Email: skip.berry@rcc.edu

DIVERSITY STATEMENT

Riverside City College School of Business embraces a notion of an intellectual community enriched by diversity with multiple dimensions, including race, ethnicity and national origin, gender, gender identity, sexuality, class, and religion. We are particularly committed to populations that have historically been excluded from equitable participation in the classroom, higher education institutions, and our communities. Individually, we are devoted to addressing our unconscious bias to pave the way for a more inclusive curriculum and learning environment.

COURSE DESCRIPTION

Introduces the network security specialist to the various methodologies for attacking a network. Students will be introduced to the concepts, principles, and techniques, supplemented by hands-on exercises, for attacking and disabling a network within the context of properly securing a network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools and appropriate defenses and countermeasures. Students will receive course content information through a variety of methods: lecture and demonstration of hacking tools will be used in addition to a virtual environment. Students will experience a hands-on practical approach to penetration testing measures and ethical hacking. This course aligns with the CEH Certified Ethical Hacker certification exam.

STUDENT LEARNING OUTCOMES

Upon completion of the course, students will be able to:

- 1. Describe the tools and methods a "hacker" uses to break into a computer or network.**
- 2. Defend a computer and a LAN against a variety of different types of security attacks using a number of hands-on techniques.**
- 3. Practice and use safe techniques on the World Wide Web.**

Office: BE 220 F

Office Hours: T/W/TH 11:00 AM – 12:30 PM
Virtual via Zoom Wednesday 9:00 – 10:00 AM

Textbook/Material:

Required for the course

#1 Riverside City College: CEHv11 (Vol 1-4) w/ iLabs - \$249.00

<https://smp.gilmore.ca/DeepLink/064c19a9-8fb2-4880-9bb4-6977c599ab4d>

*Optional bundle with a CEH certification exam voucher. **This is only if you plan to take the CEH certification exam and is NOT required for the course.**

#2 Riverside City College: CEHv11 (Vol 1-4) w/ iLabs & ECC Exam Voucher w RPS - \$579.00

<https://smp.gilmore.ca/DeepLink/00040e97-4f9f-41fa-ba17-581c977126d5>

Bookstore Option

#3 If you need to purchase through the RCC Bookstore due to financial aid or VA benefit or another requirement, you can purchase the book here:

<https://www.bkstr.com/riversideccstore/course-materials-results?shopBy=course&divisionDisplayName=&departmentDisplayName=CIS&courseDisplayName=27B§ionDisplayName=43355&programId=4670&termId=100066759>

Note that the bookstore is the same version but costs \$332.00

The eBook and iLabs are required for this course. Sometimes finances are not available right away. For example, your VA benefit or financial aid is not available right away. If this is the case, you can request a 14-day demo code so you can get started right away and then make your purchase within the first 2 weeks of class. There is no lab for the first chapter of the book so that also buys some additional time to get this done.

If you need this assistance, please email our EC-Council representative Sarah Carlson sarah.carlson@eccouncil.org and identify yourself as a student in my class and explain your situation and she will be able to get you a demo code.

IMPORTANT NOTE: When you set up your EC-Council access you must use your student email account so you will be associated with RCC and the correct class.

Once you have made your purchase, you will receive 2 codes. 1 for the eBook and 1 for the iLabs lab access. You will use the Riverside City College Student Redemption Guide that was emailed to you before the semester started. If you did not receive this guide – email skip.berry@rcc.edu and request it or grab it from the Canvas course.

GRADING METHODS

Discussions	20%
Checkpoint Exams	25%
Labs	30%

Final Exam 25%

EXAMS

All exams will be taken online and should be taken on the date and at the time they are scheduled. The only exception to this is the FINAL exam which will be taken in class. With prior approval by me and only for special circumstances, no more than one make-up exam may be allowed per semester. A make-up exam must be taken within one week of the missed exam. Otherwise, a grade of "0" will be given. There will be **NO** make-ups on the final. Missing the Final Exam could result in a grade of "F".

GRADING STANDARDS

Of the total points-90% or above is an "A", 80% a "B", 70% a "C", 60% a "D" and less than 60% is an "F".

ACADEMIC INTEGRITY

Discussing the lecture material with your classmates is part of the learning process. You are encouraged to work together with your peers on all outside assignments. However, students are expected to do their own **original** work. Please see the RCC Student Handbook for the College Policy on Academic Honesty. If in any doubt, please consult with me, and I will be happy to define what constitutes violation of academic honesty.

ATTENDANCE

I expect you to attend class regularly; please be in your seat at the start of each class meeting. It is your responsibility to be in class, to take notes, and to participate in class discussions. Exams will cover these activities. While I reserve the right to drop a student for non-attendance or inactivity, it is ultimately your responsibility to drop the course if you are too far behind or do not wish to continue the course. Not taking this action will result in a letter grade for work done/not done.

Missing 3 or more classes without notification and arrangement with the instructor will result in you being dropped from the class.

LAB REQUIREMENTS

This course requires assignments, which must be completed on a computer. You have the option of completing the assignments on any computer, which has the appropriate software.

TUTORIAL SERVICES

Everyone needs a little help from time to time. Tutorial Services provides a supportive learning environment to all students seeking academic support. We strive to help our students better prepare for classes and develop the skills necessary for a successful college career.

Tutoring is Free to All Enrolled Students

Student must be enrolled in subject requested for tutoring. Tutoring sessions are led by qualified tutors who received an "A" or "B" in the respective courses for which they choose to tutor. They reinforce specific course material emphasized by the professors and use their own successful student experiences to integrate what-to-learn with how-to-learn. All of our tutors come highly recommended by faculty members.

Phone number: (951) 222-8170

Disability Resource Center

If you have a physical, psychiatric/emotional, medical or learning disability that may impact on your ability to carry out assigned course work or exams, I urge you to contact the staff in Disabled Student Services, room CAK 130, 222-8060 (Voice) / 222-8062 (TDD). DRC will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation of disability is strictly confidential.

ASSIGNMENT SCHEDULE*

Course Summary:

Date	Details	
Mon Feb 21, 2022	Assignment Discussion 1	due by 11:59pm
	Assignment Module 02: Footprinting and Reconnaissance	due by 11:59pm
Mon Feb 28, 2022	Assignment Module 03: Scanning Networks	due by 11:59pm
Mon Mar 7, 2022	Assignment Discussion 2	due by 11:59pm
	Assignment Module 04: Enumeration	due by 11:59pm
	Assignment Module 05: Vulnerability Analysis	due by 11:59pm
Mon Mar 14, 2022	Assignment Checkpoint Exam 1 (Modules 1 - 5)	due by 11:59pm
	Assignment Module 06: System Hacking	due by 11:59pm

Date	Details	
Mon Mar 21, 2022	Assignment Module 07: Malware Threats	due by 11:59pm
Mon Mar 28, 2022	Assignment Discussion 3	due by 11:59pm
	Assignment Module 08: Sniffing	due by 11:59pm
	Assignment Module 09: Social Engineering	due by 11:59pm
Mon Apr 4, 2022	Assignment Module 10: Denial-of-Service	due by 11:59pm
	Assignment Module 11: Session Hijacking	due by 11:59pm
Mon Apr 18, 2022	Assignment Checkpoint Exam 2 (Modules 6 - 10)	due by 11:59pm
Mon Apr 25, 2022	Assignment Discussion 4	due by 11:59pm
	Assignment Module 12: Evading IDS, Firewalls, and Honeypots	due by 11:59pm
Mon May 2, 2022	Assignment Module 13; Hacking Web Servers	due by 11:59pm
Mon May 9, 2022	Assignment Checkpoint Exam 3 (Modules 11 - 14)	due by 11:59pm
	Assignment Module 14: Hacking Web Applications	due by 11:59pm
Mon May 16, 2022	Assignment Discussion 5	due by 11:59pm
	Assignment Module 15: SQL Injection	due by 11:59pm
Mon May 23, 2022	Assignment Module 16: Hacking Wireless Networks	due by 11:59pm

Date	Details	
Mon May 30, 2022	Assignment Module 17: Hacking Mobile Platforms	due by 11:59pm
Mon Jun 6, 2022	Assignment Checkpoint Exam 4 (Modules 15 - 17 & 20)	due by 11:59pm
	Assignment Discussion 6	due by 11:59pm
	Assignment Module 20: Cryptography	due by 11:59pm
Tuesday Jun 7, 2022	Assignment Final Exam (Comprehensive Modules 1 - 17 & 20)	In-Class Final on Tuesday @ 9:35AM NOT Thursday per the final exam schedule.

*The above schedule is **tentative** and is subject to change. Changes will be announced in class. If you miss a class, please check with your classmates to see if any schedule changes were made. Please see the Course Summary under the Syllabus tab for the most current dates/adjustments.