

### Basic Course Information

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|---------------------|---|---------------------|--|
| Semester:           | Fall 2025                                       | Instructor Name:    | Zambrano, William  |
| Course # and Title: | CIS 161 Intro to Cybersecurity: Ethical Hacking | Email:              | <a href="mailto:William.zambrano@imperial.edu">William.zambrano@imperial.edu</a> |
| CRN #:              | 11022   | Webpage (optional): |  |
| Classroom:          | 901   | Office #:           | 901, Email, or Zoom  |
| Class Dates:        | Aug 11, 2025 - Dec 06, 2025                     | Office Hours:       | M: 4pm-6pm/TR: 10am&1-2pm, Zoom, and Email.<br>*Subject to change.               |
| Class Days:         | Mondays and Wednesdays                          | Office Phone #:     | Use Email  |
| Class Times:        | 09:40 AM - 11:05 AM                             | Emergency Contact:  | Department Secretary<br>760-355-6361   |
| Units:              | 3   | Class Format:       | Face to Face   |

### Course Description

This course 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. (ITIS 164) (CSU)

### Course Prerequisite(s) and/or Corequisite(s)

N/A

### Student Learning Outcomes

Upon satisfactory 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.

### Course Objectives

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.

### Textbooks & Other Resources or Links

Textbook is not required for class but you must purchase a [TryHackMe.com](https://www.tryhackme.com) subscription. The subscription is \$15-\$20 a month. We will be using TryHackMe throughout the semester as part of in-class labs, homework and class assignments. You can pay for the subscription monthly for the length of the semester. Signup using your IVC student email.



### Course Requirements and Instructional Methods

**This course includes weekly deadlines scheduled throughout the semester.**

We will adhere to a weekly schedule that includes many activities, including discussions, assignments, quizzes, and exams.

### Attendance

A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.

Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.

Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

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## Online Netiquette

Grammar: Use proper grammar and college-level writing in all class interactions.

Linked Content: All content linked within the course should be 'safe for work' and appropriate.

Debate vs. Flaming: Debates are encouraged within the discussion forums. People are entitled to their opinions and a difference of opinions is welcomed. Debate the point using facts and researched credible content. Do not use offensive language and/or personal attacks toward other students.

Respect: Respect one another.

## Classroom Etiquette

Electronic Devices: Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor.

Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.

Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.

Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

## Academic Honesty

Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.

Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question. Anyone caught cheating will receive a zero (0) on the exam or assignment and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following:

- plagiarism

- copying or attempting to copy from others during an examination or on an assignment;

- communicating test information with another person during an examination;

- allowing others to do an assignment or a portion of an assignment

- use of a commercial term paper service

## Institutional Policies

Standards of Student Conduct: Information can be found here: <https://www.imperial.edu/students/student-affairs/standards-of-student-conduct/>

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Links to an external site.

### **Additional Help – Discretionary Section and Language**

Canvas Support: Can be found [online](#) and/or at the Canvas Hotline: (877) 893-9853

Learning Labs: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program

Library Services: There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

### **Disabled Student Programs and Services (DSPS)**

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6312 if you feel you need to be evaluated for educational accommodations.

### **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a full-time mental health counselor. For information see <http://www.imperial.edu/students/student-health-center/>

The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

### **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at <https://www.imperial.edu/students/student-guides/>

### **Information Literacy**

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. Speak with our library to learn more about information literacy.

<https://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/>

### **Late Submissions**

To complete the course successfully, please strive to meet all deadlines, especially on interactive elements (discussions) of the course. If life events interrupt your class work, I will work with you! Please



contact me **as soon as possible** so I can help you stay as current and provide as much support as possible. **Points will be deducted for late work.**

## Course Grading Based on Course Objectives

| Grade | Points |
|-------|--------|
| A     | 90-100 |
| B     | 80-89  |
| C     | 70-79  |
| D     | 60-69  |
| F     | 0-59   |

*\*Grade breakdown subject to change*

## Course Policies

**Participation and engagement** with the course activities and assignments is required.

### Guidelines

- This course is designed to take about **10-15 hours per week** (on average).

#### **Please plan to do the following:**

- 1) Set aside time each week to view all module materials and submit required work
- 2) Log in regularly each week to check for announcements, grades, messages, and comments
- 3) Participate in online discussions, and respond thoughtfully to your peers

### Drop Policy

- **During the first week:** Complete your first Discussion to mark your attendance and secure your spot!
- **Throughout the term:** Submit work regularly to show your active attendance. If you do not submit work for 2 modules in a row, you may be dropped for non-participation!
- **It is the student's responsibility to drop or officially withdraw from the class.**

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

## Course Responsibilities



There are strict weekly deadlines that need to be met. You will be given a list of weekly assignments that you will be responsible for. You can find these under the appropriate weekly heading (i.e. Week 1 Things to Do).

Weeks will always begin on a Monday and end on the following Sunday. Assignments are typically due at 11:59pm. We will be following the Pacific Standard Time zone for this course.

### Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

### Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through **DSPS**, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

### Anticipated Class Schedule/Calendar

| Week | Activity, Assignment, and/or Topic  | Due Dates/Tests           |
|------|---|---------------------------|
| 1    | Syllabus & Introduction, Weekly Discussion and Assignment.                          | Weekly Online Submissions |
| 2    | Syllabus & Introduction<br>Lecture, Weekly Discussion and Assignment.               | Weekly Online Submissions |
| 3    | <b>Course Objective</b><br>Lecture, Hands-On Lab, Weekly Discussion and Assignment. | Weekly Online Submissions |
| 4    | Lecture, Hands-On Lab, Weekly Discussion and Assignment.                            | Weekly Online Submissions |
| 5    | <b>Course Objective</b><br>Lecture, Hands-On Lab, Weekly Discussion and Assignment. | Weekly Online Submissions |
| 6    | <b>Course Objective</b><br>Lecture, Hands-On Lab, Weekly Discussion and Assignment. | Weekly Online Submissions |
| 7    | Lecture, Hands-On Lab,  | Weekly Online Submissions |



IMPERIAL VALLEY COLLEGE

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| 8  | <b>Course Objective</b><br>Lecture, Hands-On Lab, Weekly Discussion and Assignment. | Weekly Online Submissions |
| 9  | <b>Course Objective</b><br>Lecture, Hands-On Lab, Weekly Discussion and Assignment. | Weekly Online Submissions |
| 10 | Lecture, Hands-On Lab,  | Weekly Online Submissions |
| 11 | <b>Course Objective</b><br>Lecture, Hands-On Lab, Weekly Discussion and Assignment. | Weekly Online Submissions |
| 12 | <b>Course Objective</b><br>Lecture, Hands-On Lab, Weekly Discussion and Assignment. | Weekly Online Submissions |
| 13 | Lecture, Hands-On Lab   | Weekly Online Submissions |
| 14 | Hands-On Lab  | Weekly Online Submissions |
| 15 | Hands-On Lab  | Weekly Online Submissions |
| 16 | Hands-On Lab  | Weekly Online Submissions |
| 17 | <b>Final Exam</b>   | <b>TBA</b>                |

\*\*\*Subject to change without prior notice\*\*\*