



IMPERIAL VALLEY COLLEGE

**Note to Instructor: Replace the placeholder text beneath the headings with the appropriate information for your course. Please note that all sections, with the exception of "Other Course Information," are required elements.**

### Basic Course Information

|                   |                                   |                        |                                    |
|-------------------|-----------------------------------|------------------------|------------------------------------|
| Semester:         | <b>Fall 23</b>                    | Instructor Name:       | <b>Bijan Houshiar</b>              |
| Course Title & #: | <b>CIS 166: Digital Forensics</b> | Email:                 | <b>Bijan.houshiar@imperial.edu</b> |
| CRN #:            | <b>10901</b>                      | Webpage (optional):    |                                    |
| Classroom:        | <b>ONLINE</b>                     | Office #:              | <b>Zoom</b>                        |
| Class Dates:      | <b>8/14/2023 - 12/09/2023</b>     | Office Hours:          | <b>By Appointment</b>              |
| Class Days:       | <b>Online</b>                     | Office Phone #:        |                                    |
| Class Times:      | Online                            | Emergency Contact:     |                                    |
| Units:            | 3                                 | Class Format/Modality: |                                    |

### Course Description

This course is an introduction to the methods used to properly conduct a computer forensics investigation beginning with a discussion of ethics, while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession; the computer investigation process; understanding operating systems boot processes and disk structures; data acquisition and analysis; technical writing; and a review of familiar computer forensics tools. (CSU)

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

### Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Apply digital forensics concepts to diagnose a computer system failure. (ILO1, ILO2, ILO4)
2. Describe the general characteristics of a storage device. (ILO1, ILO2, ILO4)
3. Conduct a computer investigation using proper digital evidence handling. (ILO1, ILO2, ILO 4)

### Course Objectives

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

1. Define computer forensics.
2. Summarize how to prepare for a computer investigation.
4. Measure the different ways for proper data acquisition.
5. Classify the rules for proper digital evidence handling.
6. Analyze how data is stored and managed by an operating system.
7. Analyze various computer forensics tools.
8. Validate the evidence during the analysis process.
9. Identify and reconstruct graphics files.
10. Describe the importance of network forensics.

Updated 6/2023

### Textbooks & Other Resources or Links

No textbook required. This is a zero-cost textbook course.

### Course Requirements and Instructional Methods

To use course materials, Internet access and a computer are required. Windows system is preferred.

### Course Grading Based on Course Objectives

|                              |                 |
|------------------------------|-----------------|
| Discussion .....             | Up to 50 Points |
| Midterm exam .....           | 50 Points       |
| Final Exam .....             | 50 Points       |
| Quizzes and Activities ..... | Up to 75 Points |

Grades:

A = 90 - 100 %

B = 80 - 89 %

C = 70 - 79 %

D = 60 - 69 %

F = below 60%

### 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.



## Course Policies

There is no late policy. All assignments are due within one week. However, there will be a 25% deduction for one week late if the instructor allows it. Assignments passed due by more than one week will not be accepted. Instructor may revise if there is proper documentation.

No late work will be accepted after the term ends.

Discussion has no makeup and will not be graded if submitted after the due date.

## 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.

## Anticipated Class Schedule/Calendar

Weekly agenda and due dates are listed on college course Canvas.