

**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 2021</b>	Instructor Name:	<b>Gordon Bailey</b>
Course Title & #:	<b>Cybersecurity Forensics</b>	Email:	<b>Gordon.bailey@imperial.edu</b>
CRN #:	<b>10711</b>	Webpage (optional):	
Classroom:	<b>TBA online</b>	Office #:	<b>7603556150</b>
Class Dates:	<b>TBA</b>	Office Hours:	<b>Zoom appointment</b>
Class Days:	<b>TBA</b>	Office Phone #:	<b>760-355-6150</b>
Class Times:	online	Emergency Contact:	
Units:	3	Class Format:	online

### 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. (C-ID ITIS 165)

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

*None*

### Student Learning Outcomes

Computer Forensics as a profession  
Computing investigation processes  
Microsoft operating systems, boot processes and disk structures  
Macintosh and Linux operating systems, boot processes and disk structures  
The investigator's office  
Current computer forensics tools  
Digital evidence controls  
Crime/incident scene processing  
Data acquisition  
Computing forensics analysis  
Email investigations  
Graphic image recovery  
High tech reports  
Expert witness overview

### Course Objectives

1. Define computer forensics.
2. Summarize how to prepare for a computer investigation.
3. Summarize the certification requirements for computer forensics labs.

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.
11. Analyze email investigations.
12. Generate a forensic report.
13. Describe guidelines for testifying in court.
14. Maintain a high level of ethical behavior in their work.

### **Textbooks & Other Resources or Links**

Jason Sachowski 2018. *Digital Forensics and Investigations: People, Process, and Technologies to Defend the Enterprise 1*. CRC Press ISBN: 978-1138720930.

### **Course Requirements and Instructional Methods**

**Audio Visual**

**Computer Assisted Instruction**

**Demonstration**

**Discussion**

**Group Activity**

**Lab Activity**

**Lecture**

**Simulation/Case Study**

### **Distance Learning Course Grading Based on Course Objectives**

Class Activity

Essay

Mid-Term/Final Exam(s)

Objective

Oral Assignments

Problem Solving Exercise

Quizzes

Skill Demonstration

Written Assignments

## Course Policies

- 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.

## ***Classroom Etiquette***

### **Required Information --Discretionary language**

This is where an instructor explains his/her policy on these matters. Here is some suggested language:

- **Electronic Devices:** Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor. **Consider:** specifics for your class/program
- **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***

### ***Required***

### ***Language***

- **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 portion of an assignment
  - use of a commercial term paper service

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

The instructor can add the information pertinent to his or her class here. Some suggested language:

- **Blackboard** support center:  
<http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543>
- **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)

**Required Language:** 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

**Required Language:** Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime 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

**Required Language:** 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 [http://www.imperial.edu/index.php?option=com\\_docman&task=doc\\_download&gid=4516&Itemid=762](http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762)

### Information Literacy

**Required Language:** Imperial Valley College is dedicated to help students skillfully discover, evaluate, and

use information from all sources. Students can access tutorials at <http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/>

### Other Course Information

*[Optionally, include other necessary information.]*

### 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