ABC-123-81 Course Syllabus

Contact Information

Instructor	Jesse Varsalone
Email	jvarsalone@champlain.edu
Office hours	Virtual Office hours: Wednesday evening 2:00 PM-4:00 PM EST
Phone	410-694-6629

Course Information

Course Title	Computer Forensics I
Course Number	FOR-240-45
Course Description	This course will introduce the student to computer forensics, the art and science of using technology to obtain evidence for use in criminal and civil court. Students will obtain an introduction to basic computer and networking concepts, the Internet, computer crime statutes, management of evidence, the industry best-practices for examining computers that might contain crime-related information. The topics of the course are reinforced with hands-on exercises.
Course Dates	10/27/08 - 12/12/08

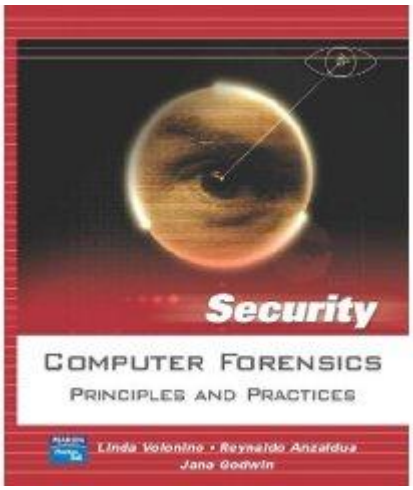
Student Centered Learning Outcomes

Through the (use of ...discussions, projects, written essays, activities and case studies?) students will develop the abilities to (X, Y, Z). The competencies achieved will enable them to:

1. Students will *discuss* computer crimes and their impact on society
2. Students will *compare and contras*t Wardriving tools
3. Students will *identify* computer forensic certifications.
4. Students will *examine* common forensic tools used within the industry.
5. Students will *compare and contrast* open source forensic tools and proprietary forensic tools
6. Students will *identify* methods for performing iPhone forensics.
7. Students will *examine* different distributions of Linux.
8. Students will *compare and contrast* different distributions of Linux.
9. Students will *describe* Man in the Middle and Phishing attacks
10. Students will *analyze* a packet capture in Wireshark

Textbooks

Required Texts



Computer Forensics: Principles and Practices

by Linda Volonino (Author), Reynaldo Anzaldua (Author), Jana Godwin (Author)

Prentice Hall; 1 edition (August 31, 2006

ISBN-10: 0131547275

ISBN-13: 978-0131547278

Other Supplementary Readings

Articles as Assigned.

Topic Outline

- Week 1 - Computer Crimes/Wardriving
- Week 2 - Forensics Tools/ Open Source versus Closed Source
- Week 3 - Portable Devices/ iPhone Forensics
- Week 4 - Linux / Linux Distributions
- Week 5 - Wireshark/Sniffing/Ethical Implications
- Week 6 - Attacks/Phishing/Man-in-the Middle Weekly topic
- Week 7 - Final Exam Preparation

Academic Standards

Division message if appropriate

Methods of Assessment

Your final grade will be determined based on: [please customize for your course]

Graded Elements	Weights
Participation and Engagement	10
Research Paper # 1 - Wardriving	5
Research Paper # 2 - Forensic Tools	15
Research Paper # 3 - iPhone Forensics	10
Research Paper # 4 - Linux	15
Research Paper # 5 - Phishing	5

Research Paper # 6 - Man-in-the-Middle	5
Project # 1 - Wireshark	10
Final Exam	25
Total	**100 pts.**

All projects will be graded using the grading matrix below: [EXAMPLE - please insert your own]

Action Learning Grading System						
Code	**Written Assignment Guidelines**	**Low Score**	**To**	**High Score**	**Visual & Creative**	**Quantitative**
T	**Technical Quality & Presentation**	Spelling errors, poor punctuation and sentence structure. Sloppy presentation. Difficult to figure out.		Spelling, sentence structure and grammar are solid. Material is presented in an easy to read format. Good flow and layout.	Care and attention to detail. Care to use color, careful layout, titles etc.	Problem and calculations laid out neatly and in a logical sequence.
I	**Integration of Material**	Concepts missed or not addressed.		Material thoroughly integrated and includes outside examples. Concepts explained in your own words.	Concepts are covered by virtue of the material included.	Calculations and terms used that demonstrate and understanding of the business concepts behind the calculations.
E	**Expression: Quality & Completeness**	Sentences are lacking expression and wouldn't generate any interest on behalf of the reader.		Sentences relate to each other with feeling. Thoughts are developed and in a logical sequence.	Careful thought to what is included and why. Inclusive of everything that should be	

					there.	
C	**Creativity & Critical Thinking**	Reiterate text with no interpretation or self-expression. Short and hollow explanations. The safe way out.		Interpret concepts and find examples that support or contradict them. Demonstrates the ability to take risk.		

- **Participation and Engagement**
  Attendance and involvement is measured though your presence and participation in the all aspects of the class. Your participation is extremely important to the learning experience for both you and your classmates.

  Class discussions, in which you willingly share your thoughts and ideas, are also an integral part of the class and your learning process. Your participation in discussion (and the assessment of discussions for grading) will be based on the following guidelines:

  1. Respond to others with questions or comments that provoke elaboration.
  2. Bring in resources from outside the class materials (website, reading in another class, work experience etc)
  3. Link the comments of two people in a very explicit way that has not been expressed.
  4. Demonstrate your interest with an active listening question to another.
  5. Build on another's thinking.
  6. Use the course materials, including quotes from readings, as "evidence" to support your thinking.
  7. Avoid unsupported opinion.
  8. Please describe any addition expectation you need to share
- **Class Activities:**
  Class discussions, Posting, PowerPoint Slides, and Video Files
- **Weekly Assignments/Projects:**
  You will be assigned papers that require a substantial amount of research
- **Projects:**
  You will be doing extensive research to analyze and recover artifacts from a Wireshark packet
- **Testing Information:**
  The Final will be comprehensive with essay and short answer questions.

Grade Calculation

The following scale will be used to determine letter grades:

Grade	Range
A	93+
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	Below 60

Students With Special Needs

If you believe that you have a disability requiring accommodations in this class, please contact the Coordinator of Support Services for Students with Disabilities as soon as possible. After you receive your accommodation form, please contact the instructor ASAP to insure all accommodations are implemented in a timely fashion. It is the student's responsibility to seek and secure accommodations prior to the start of a test or project.

Contact: Janine Allo
Office of Support Services for Students with Disabilities
Office: Hauke 007
Phone: 802-865-5484
Email:mailto:jallo@champlain.edu

Or

Contact: Julie Reville
Office of Support Services for Students with Disabilities
Office: Hauke 007
Phone: 802-651-5961
Email:mailto:jreville@champlain.edu

Academic Honesty Policy

In the preparation and presentation of any assigned work-including examinations, tests, quizzes, term papers, reports, themes and other written or oral exercises-every student shall conform to a strict standard of academic honesty. Any attempt to

deceive a faculty member or to help another student to do so will be considered a violation of this standard. In all assignments, students must acknowledge the words and/or ideas of others taken from print or electronic media, whether a direct quotation or a paraphrase; any omission of this is dishonest. Cheating on examinations or tests consists of knowingly giving, receiving or using-or attempting to give, receive or use-unauthorized assistance during an examination or test. A faculty member may record a grade of "zero" for any assignment on which a student has plagiarized or cheated. For repeat offenses within a single course, the faculty member may record a grade of "F" for the course. Violations of this policy in multiple courses may result in dismissal from the College. A student may appeal these decisions according to the Academic Grievance Procedure.

Additional information

Brief Rationale Computer Forensics is an exploding field and the demand for people with computer forensic skills is growing every day. A large number of colleges and universities are now starting computer forensics programs because of the increase in the number of computer related crimes. Champlain College has been a leader in the respect that they were one of the first colleges to have a Computer Forensics program. Champlain is also fortunate to have Garry Kessler as a faculty member. Gary is a leader in the computer forensics fields of stenography and file signature analysis.

Brief Statement of your Teaching Philosophy I have been teaching since 1994.I started out teaching mathematics at a high school in the inner-city in Baltimore. I left the city after 5 years of service and taught high school in the County for three years. I was a swimming, wrestling, and football coach. The reason I mention the coaching is that it is also a form of teaching.

I taught as an Adjunct Professor at Coppin State University and UMBC and Towson computer training centers. For four years, I was the director of MCSE and network security at Johns Hopkins Computer Career Institute. After leaving JHU, I went to Stevenson University were I taught courses in networking, Cisco, forensics, Active Directory, and Exchange. I am currently an instructor at the Defense Cyber Investigation Training Academy where we teach DoD agents who work in the field.

It does not matter whether you are teaching in the inner-city or DoD agents, teaching should be focused on the learner. The important thing is to help the student learn and develop their skills so they can go on to have a rewarding, fulfilling career. My primary goal is to help students; your role is to accept the help and mentoring I will provide you with in this course. I honestly believe that a good teacher makes an important difference in how prepared that student will be in the workforce. A good teacher will help to mold students so they have a positive outlook and are excited about the career filed they have chosen.