PROPOSED SYLLABUS FOR INF-270 Digital Forensics

Bergen Community College

Information Technology
Course Syllabus

Course Title:
INF-270 Digital Forensics

Credits/Hours:
2 lecture, 2 lab, 3 credits

Prerequisite:
INF-267 OR INF-170 OR permission of Department Chair

Course Description:
INF-270 Digital Forensics explores the use of networks as a tool of criminals. Our networked world has become a place of criminal activity that threatens our national security. This course discusses how a "networked" world has bred new crimes and new responses to those crimes and addresses the ways in which emerging technologies challenge existing laws and criminal procedures. Detecting and remediating national network security breaches will be explored. 2 lecture, 2 lab, 3 credits

Textbooks and Supplies:
See course outline

Student Learning Objectives		Assessment Measures
1.	Describe laws that relate to current technologies and discuss their strengths and weaknesses.	Written exam
2.	Detect and recognize the vulnerabilities of the network and remediate using best practices	Written Exam Lab Assignments
3.	Describe emerging and possible new threat vectors, particularly the emergence of automated threats (AI-driven attacks).	Written Exam; Lab Assignments
4.	Describe and evaluate tools (not necessarily illegal) that have become controversial in the digital age (social media, disinformation campaigns, etc.).	Written Exam; Lab Assignments
5.	Discriminate between non-state supported threats and state-supported threats and describe policy issues with regard to same.	Written Exam; Lab Assignments

Course Content:
See course outline

Assessment:
An average of 60% from combined assessment measures is required to demonstrate proficiency in course material.

3 Exams	75%
Labs	15%
Homework	10%
Total	100%

Quizzes:
There may be several quizzes, each worth 10 points, given at the beginning pre-selected classes. The quiz material will be based upon the prior lectures and labs, homework, and/or the reading assignments. A quiz cannot be made up if missed. A student entering class late, after a quiz has begun, will not be entitled to extra time to complete the quiz. Students entering class after a quiz is completed will not be permitted to take the quiz and a zero grade will be assigned.

Testing:
Students ***are required*** to take examinations on the day and time they are scheduled. If special circumstances require a test schedule adjustment, this must be ***worked out in advance*** with the instructor. If a student misses an exam (except for prearranged circumstances with the instructor) a zero grade will be assigned.

The instructor can be reached by ***telephone*** (see course outline for appropriate phone number)**,** ***e-mail, or a written note*** can be left in the Divisional Office (during the day) or in the Adjunct Office. If there are extreme circumstances (documentation may be required) that prevent a student from taking a test or an exam according to the published schedule, the student should use one of the above options to contact the instructor before the next class. An arrangement for a special testing schedule is solely at the ***discretion of the instructor***. A student who waits for the next class session to speak with the instructor will not be accommodated with a special test schedule.

It is the student's responsibility to finish an examination correctly and completely. Once the examinations are returned to the students, there will be ***no grade adjustments*** made due to inappropriate completion of the response form.

The use of electronic devices during exams is prohibited. Any student using an electronic device during an exam (unless directed to do so by the instructor) will receive a 0 for the exam.

Projects, Assignments, Laboratory Work:
Assignments are hands-on productions that show the instructor that the student understands concepts presented in class and in the readings and can competently use specified software to apply specific concepts.

It is anticipated that students will spend at least 4 hours per week perfecting their skills and completing their assignments. Some assignments are required for grading. They must be submitted on the assignment due date, and ***cannot be handed in late***. Acceptance of late assignments is solely at the ***discretion of the instructor***.

Some assignments are instructional and need not be submitted. However lab assignments that are correct and complete and submitted on-time will help students prepare for graded assignments, quizzes, and exams.

Homework:
In addition to any homework assignment given during class, it is a **standing assignment** that the student read each chapter of the book prior to its discussion. Following the class discussion, the student should reread the material and work with the exercises throughout the text. It is anticipated that students will spend at least 4-hours per week reading the text and working with the exercises and supplemental resources.

Policies:

- Accommodations for Disabilities: Bergen Community College aims to create inclusive learning environments where all students have maximum opportunities for success. Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Specialized Services at 201-612-5269 or via email at ossinfo@bergen.edu for assistance.
- Lateness – The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.
- The student must adhere to all college polices. Due to the nature of this course, it is recommended that the student review the policy titled *"Acceptable Information Technology Use at Bergen Community College"*.
- The use of portable electronic devices such as pagers and cell phones is not permitted while class is in session. Please be sure to silence electronic devices before entering class.
- Students are expected to demonstrate listening, reading, note taking, and writing skills. The student will need to take notes during class discussions and understand and follow verbal and written directions. All assignments and correspondence with the instructor (including e-mail) must be well written in full sentence format. Proper paragraph format must be used for all postings to the student bulletin board (if applicable).
- The subject line of all e-mail correspondence to the instructor must contain the course number and section and student's name. Any e-mail received without this information will not be opened.
- Plagiarism in any form will be treated as a failure to complete an assignment. All work submitted should reflect individual effort by the student.
- In borderline cases that arise in almost every class each semester a student's attendance, class participation, and observed effort will be considered in helping to determine the student's final grade.

If the instructor does not appear after 20 minutes following the scheduled time, students should generate an attendance list. One volunteer member need deliver the list, containing the course title, date, and instructor's name, to the Adjunct Office or to the Divisional Office (during the day)
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Additional policy and assessment information may be distributed by individual instructors.

PROPOSED OUTLINE FOR INF-270 Digital Forensics

Bergen Community College

Information Technology
[Semester year]

Instructor:	
Faculty Web-Site:	
E-mail:	
Telephone:	
Office:	
Office Hours:	

Course Title: INF-270 Digital Forensics *Course Syllabus at* Course Web Site:
Textbooks and Supplies: • TBD

Week	**Topic***	**Assignments***
1 _____	Topic 1 – Cybercrime A New High Tech Crime Paradigm What is cybercrime? Principles of cybercrime	
2 _____	Topic 2 – Information Assurance Attack dimensions Critical Infrastructure Protection	
3 _____	Topic 3 – IT Enabled Abuse, Attacks and Crimes Types of abuse, attacks and crimes Evolving forms of attacks, abuse and crimes	
4 _____	Topic 4 -- Computer Abusers and Cybercriminals Behavioral and social traits of abusers Categorizing Cyber Abusers Attackers and Criminals	
5 & 6 _____	Topic 5 – Theories of Computer Enabled Abuse and Crime Classical criminology Trait theories Social process theories Conflict theories **Exam 1**	

Week	**Topic***	**Assignments***
7 _____	Topic 6 – Social and Economic Impacts of Cybercrime Human and financial costs of cybercrime Economic and social impacts of cybercrime	
8 _____	Topic 7 – Emerging Crime Related Issues and Controversies Emerging potential for cybercrime and abuse Controversial cybercrime related issues	
9 _____	Topic 8 – Cyber Laws and Regulations Rationale and reach of cyberlaws How laws and regulations are created and administered Key Federal cybercrime laws and InfoSec regulations	
10 _____	Topic 9 – Investigating and Prosecuting Cybercrime Criminal justice system concepts Legal issues governing investigative procedures Crime scene processing and evidence management Prosecuting cybercriminals **Exam 2**	
11 _____	Topic 10 – Preventing Cybercrime via Information Security Personal and organizational Information Security protocols Advancing the security posture of the organization Purpose and value of auditing	
12 _____	Topic 11 – Future Opportunities for Managing Cybercrime What more can government do? Transformation of information security folk artistry Career opportunities	
13 _____	**Lab Exam**	
14 _____	Review	
15 _____	**Exam 3**	
*Topics, quizzes, exams, and assignments may be modified due to time constraints		