

**OAKTON COMMUNITY COLLEGE  
GENERIC COURSE SYLLABUS**

I.	<u>COURSE PREFIX</u>	<u>COURSE NUMBER</u>	<u>COURSE NAME</u>	<u>CREDIT</u>	<u>LECTURE</u>	<u>LAB</u>
	CNS	174	Introduction to Computer Forensics	3	3	1
	(Formerly LAN 185)					

II. PREREQUISITE:

CNS 111 (Formerly LAN 111) or LAN 171 or consent of instructor, coordinator or program chair

III. COURSE (CATALOG) DESCRIPTION:

This course provides students with the knowledge and solid foundation by introducing Computer Forensics as an entry into the professional field of Computer Forensics and investigation. The course covers current and past Operating Systems and a range of computer hardware and forensics software tools. The course also assists students in preparing for the appropriate Network or Information Security Certification examinations.

IV. LEARNING OBJECTIVES:

Upon completion of this course the student will be able to understand:

1. Computer Forensics and Investigations as a Profession
2. Enforcement agency investigations and corporate investigations
3. How to manage a Computer Investigation
4. Popular Computer-Forensics software and explain how to use it.
5. How to recover data for computer investigations and understand file systems and their associated Operating Systems
6. Forensic Lab Certification requirements
7. How to select a basic Forensic workstation
8. How to create a Forensic Boot Floppy Disk
9. How to Use Command-line Forensics Tools
10. How to Explore graphical users interface (GUI) Forensics tools
11. How to Identify and Secure Digital evidence at an incident scene
12. How to Store Digital evidence
13. Process private-sector incident scenes
14. Plan data recovery contingencies
15. Understand and perform Computer Forensics-analysis
16. Investigate E-mail crimes and violations
17. Identify Copyright issues with graphics
18. Fata compression
19. The importance of reports
20. How to list procedural and evidence rules requirements

## V. ACADEMIC INTEGRITY:

Students and employees at Oakton Community College are required to demonstrate academic integrity and follow Oakton's Code of Academic Conduct. This code prohibits:

- cheating
- plagiarism (turning in work not written by you, or lacking proper citation)
- falsification and fabrication (lying or distorting the truth)
- helping others to cheat
- unauthorized changes on official documents
- pretending to be someone else or having someone else pretend to be you
- making or accepting bribes, special favors, or threats, and
- any other behavior that violates academic integrity.

There are serious consequences to violations of the academic integrity policy. Oakton's policies and procedures provide students a fair hearing if a complaint is made against you. If you are found to have violated the policy, the minimum penalty is failure on the assignment and, a disciplinary record will be established and kept on file in the office of the Vice President for Student Affairs for a period of 3 years.

Details of the Code of Academic Conduct can be found in the Student Handbook.

## VI. OUTLINE OF TOPICS:

1. Computer Forensics and Investigations as a Profession
2. Understanding Computer Investigations
3. Working with Windows and DOS Systems
4. Macintosh and Linux Boot Processes and Disk Structures
5. The Investigator's Office and Laboratory
6. Current Computer Forensics Tools
7. Digital Evidence Controls
8. Processing Crime and Incident Scenes
9. Data Acquisition
10. Computer Forensic Analysis
11. E-mail Investigations
12. Recovering Image Files
13. Writing Investigation Reports
14. Becoming as Expert Witness

## VII. METHODS OF INSTRUCTION:

Methods include lectures, class exercises and class discussion, perform lab exercise and projects.

## VIII. COURSE PRACTICES REQUIRED:

- Read course materials - textbook and current journals
- Attend and participate in class lecture and lab
- Complete required assignments, exercises, quizzes, and exams

IX. INSTRUCTIONAL MATERIALS:

- Textbook and Lab book: Guide to Computer Forensics and Investigations, Thomson Course Technology
- Current Self-Test Software
- Software manuals

X. METHODS OF EVALUATING STUDENT PROGRESS:

Quizzes, examinations, completion of lab assignments, exercises, and LAN project

XI. OTHER COURSE INFORMATION:

If you have a documented learning, psychological, or physical disability you may be entitled to reasonable academic accommodations or services. To request accommodations or services, contact the ASSIST office in the Learning Center. All students are expected to fulfill essential course requirements. The College will not waive any essential skill or requirement of a course or degree program.