Syllabus

CSC 274 Computer Forensics and Investigations

General Information

Date

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Author

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Department

Computing Sciences

Course Prefix

CSC

Course Number

274

Course Title

Computer Forensics and Investigations

Course Information

Credit Hours

3

Lecture Contact Hours

3

Lab Contact Hours

0

Other Contact Hours

Catalog Description

Computer Forensics and Investigation presents principles and techniques of conducting computing investigations. Computer forensics involves obtaining and analyzing digital information for use as evidence in civil, criminal, or administrative cases. Topics include: ethics, current computer forensics tools, digital evidence controls, processing crime and incident scenes, data acquisition, e-mail investigations, and becoming an expert witness. Hands-on experience, using a forensic software package will be part of the course.

Key Assessment

This course does not contain a Key Assessment for any programs

Prerequisites

None

Co-requisites

None

Grading Scheme

Letter

First Year Experience/Capstone Designation

This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category

None

FLCC Values

Institutional Learning Outcomes Addressed by the Course

Vitality
Inquiry
Perseverance
Interconnectedness

Course Learning Outcomes

Course Learning Outcomes

1. Describe a computer investigation and the steps involved to complete a case

2. Use appropriate tools for forensic investigations

3. Prioritize tasks in an investigation

Outline of Topics Covered

I. Computer Forensics as a Profession

II. Definitions, history, resources

III. Computing Investigation Processes

i. Systematic approach, data-recovery, steps in an investigation

IV. Microsoft Operating Systems, Boot Processes and Disk Structures

i. Understanding the file systems, boot and startup tasks

ii. Macintosh and Linux Operating Systems, Boot Processes and Disk Structures

iii. Understanding the file systems, boot and startup tasks, and other disk structures

V. The Investigator's Office

i. Forensic lab certification requirements, physical layout of a lab and workstations

ii. Current Computer Forensics Tools

VI. Explore command line and GUI tools, hardware tools

VII. Digital Evidence Controls

i. Identifying, securing at the scene, cataloging and processing evidence

VIII. Crime/Incident Scene Processing

i. Preparing for a search, seizing digital evidence, reviewing a case