

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: CAP 2141

COURSE TITLE: Data Forensics II - Advanced

PREREQUISITE(S): CAP 2140

COREQUISITE(S): None

CREDIT HOURS: 4

CONTACT HOURS/WEEK: 4

CONTACT HOUR BREAKDOWN:

Lecture Discussion:	3
Laboratory:	1
Other _____:	

FACULTY WORKLOAD POINTS: 4

STANDARDIZED CLASS SIZE ALLOCATION: 24

COURSE DESCRIPTION: This course provides information on advanced computer forensics and how to prepare for and conduct a computer investigation, use of computer forensics software including Access data's Forensic Toolkit FTK and Guidance Software's Encase, use of computer forensics acquisition hardware including Forensic Recovery Evidence Device (FRED), Ultimate Tool Kit Write Blocker suite, Voom Hardcopy II, advanced techniques in Windows Registry analysis utilizing FTK's Registry Analyzer, recover forensic data from handheld devices such as PDAs, Pagers, and cell phones using Paraben's Cell and PDA Seizure, password recovery tools including Accessdata's PRTK, analysis of Windows XP operating system, and forensic analysis of Vista, Microsoft's newest operating system. Hands-on exercises are an integral part of the course.

SUGGESTED TEXT(S): File System Forensic Analysis; Publisher: ISC2

IMPLEMENTATION DATE: Spring Term, 2007 (20072)

REVIEW OR MODIFICATION DATE:

COURSE TOPICS		CONTACT HOURS <u>PER TOPIC</u>
I.	Advanced computer forensics and how to prepare for and conduct a computer investigation.	8
II.	Use of computer forensics the latest software	10
III.	Use of computer forensics acquisition hardware	10
IV.	Advanced techniques in Windows Registry analysis	6
V.	Recover forensic data from handheld devices such as PDAs, Pagers, and cell phones	6
VI.	Password recovery tools	6
VII.	Analysis of Windows XP operating system	6
VIII.	Hands-on testing	4
IX.	Written Testing	4
		60

PROGRAM TITLE: Computer Engineering Technology

COURSE TITLE: Data Forensics II - Advanced

CIP NUMBER: 0615.040200

LIST PERFORMANCE STANDARDS ADDRESSED:

01.0 DEMONSTRATE UNDERSTANDING OF NETWORKED ENVIRONMENTS - The student will be able to:

- 01.01 Explain the use of binary numbers to represent instructions and data.
- 01.02 Describe the hardware implications of the use of binary representation of instructions and data.
- 01.03 Convert numbers among decimal, binary, and hexadecimal representation.
- 01.04 Perform binary arithmetic.
- 01.05 Identify various coding schemes (ASCII, etc.).
- 01.09 Identify and discuss issues (such as security, privacy, redundancy, etc.) related to networked environments.
- 01.10 Identify and discuss issues related to naming conventions for user ids, email, passwords, and network devices.

04.0 UNDERSTAND, INSTALL AND CONFIGURE COMPUTER SOFTWARE - The student will be able to:

- 04.01 Describe the functions and major components (BIOS, task management, etc.) of a computer operating system.
- 04.02 Identify current operating systems and describe their important features.
- 04.04 Identify current systems utilities and describe their functions.
- 04.05 Use system software to perform routine maintenance tasks such as backup, hard drive defragmentation, etc.
- 04.10 Use basic features of office productivity software.
- 04.12 Use software produced by multiple vendors.

08.0 PERFORM NETWORK ADMINISTRATION AND MANAGEMENT ACTIVITIES - The student will be able to:

- 08.02 Establish, document and disseminate user security guidelines.
- 08.08 Perform network monitoring activities to ensure account integrity.
- 08.11 Document security policies and violations.
- 08.12 Install and update anti-virus software.
- 08.15 Address security issues raised by the ability to access server remotely.

12.0 DEMONSTRATE PROFESSIONAL DEVELOPMENT SKILLS - The student will be able to understand the importance of:

- 12.01 Attending classes, seminars, and workshops.
- 12.02 Reviewing literature and reading current literature.
- 12.03 Evaluating skills and taking necessary steps to upgrade.



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

Section 1	
COURSE PREFIX AND NUMBER: CAP 2141	SEMESTER CREDIT HOURS: 4
COURSE TITLE: Data Forensics II - Advanced	

Section 2

TYPE OF COURSE: (Click on the box to check all that apply)

AA Elective AS Required Professional Course College Prep
 AAS Professional Elective AAS Required Professional Course Technical Certificate
 Other _____
 General Education: (For General Education courses, you must also complete Section 3 and Section 7)

Section 3 (If applicable)

INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

Communication Social & Behavioral Sciences Mathematics
 Natural Sciences Humanities

Section 4

INTELLECTUAL COMPETENCIES:

Reading Speaking Critical Analysis Quantitative Skills Scientific Method of Inquiry
 Writing Listening Information Literacy Ethical Judgment Working Collaboratively

Section 5		
LEARNING OUTCOMES		METHOD OF ASSESSMENT
•	The student will understand advanced computer forensics and how to prepare for and conduct a computer investigation.	Written and hands-on assessments
•	The student will become proficient in the use of computer forensics software including Accesdata's Forensic Toolkit FTK and Guidance Software's Encase.	Written and hands-on assessments
•	The student will become proficient in the use of computer forensics acquisition hardware including Forensic Recovery Evidence Device (FRED), Ultimate Tool Kit Write Blocker suite, Voom Harcopy II	Written and hands-on assessments
•	The student will learn advanced techniques in Windows Registry analysis utilizing FTK's Registry Analyzer.	Written and hands-on assessments

Section 5 (Continued)

•	The student will learn to recover forensic data from handheld devices such as PDAs, Pagers, and cell phones using Paraben's Cell and PDA Seizure.	Written and hands-on assessments
•	The student will become proficient with password recovery tools including Accessdata's PRTK.	Written and hands-on assessments
•	The student will become proficient in the analysis of Windows XP operating system.	Written and hands-on assessments
•	The student will be introduced to the forensic analysis of Vista, Microsoft's newest operating system.	Written and hands-on assessments

Section 6

Name of Person Completing This Form: Ernie Friend