

# Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.



# **COURSE SYLLABUS**

# CJUS 363 Computer and Cyber Forensics

### **COURSE DESCRIPTION**

The course will focus on the role of computer forensics and the methods used in the investigation of computer crimes. The course explains the need for proper investigation and illustrates the process of locating, handling, and processing computer evidence.

#### RATIONALE

This course is an introduction designed to familiarize the student with current approaches to computer, digital and cyber related forensics techniques and reinforce the appropriate procedures for evidence collection and processing. This course augments the core curriculum for criminal justice with a special emphasis in the challenging field of computer sciences. As electronic information increases in its importance and use in the court of law, future investigators need to understand the methods and processes available to them, or to their coworkers to collect, process, analyze and use information evidence supporting investigations and judicial proceedings.

#### I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the <u>Academic</u> <u>Course Catalog</u>.

#### II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: <u>http://bookstore.mbsdirect.net/liberty.htm</u>

### III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended)
- C. Blackboard <u>recommended browsers</u>
- D. Microsoft Office

#### IV. MEASURABLE LEARNING OUTCOMES

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

Describe digital forensic sciences as a profession.

- A. Explain basic tools and techniques used in the field of computer forensics sciences.
- B. Evaluate an emerging issue in computer and cyber forensics.

- C. Participate in a cyber crime investigation.
- D. Articulate a biblical worldview of computer sciences, and the legal profession.

### V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and lecture presentations
- B. Course Requirements Checklist

After reading the Syllabus and <u>Student Expectations</u>, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (3)

Discussion boards are collaborative learning experiences. Therefore, the student will participate in 3 Discussion Board forums. Threads must be at least 400 words. The initial thread must contain two scholarly sources. In addition to the thread, the student must post replies of at least 200 words to 3 classmates' threads and cite one source.

D. Deleted Files Forensics Paper

The student will submit a 2–3-page paper outlining the options for retrieving the deleted files and explain their capabilities by outlining what hardware and software was needed.

E. Term Paper

The student will submit a 10-12 page Term Paper topic specific to computer crime or computer forensics that represents his/her original work. This assignment will be submitted in 4 parts: Topic Submission, Outline, Bibliography, and Final Submission. The paper must be in current APA format and have a minimum of 5 scholarly sources.

F. Hashing Files Project

The student will compose a 1–2-page paper explaining what a hash value is and why it is important in computer forensics. The student must include detailed documentation of the activities that he/she conducted using the hashing website, documenting his/her hash values and discussing why the hash value changed.

G. Quizzes

The student will take 4 quizzes, each containing 25 multiple choice or written questions to be completed in 30 minutes. Each quiz will be open-book/open-notes. The questions will be a combination of questions provided in the assigned chapters, developed from chapter content, and expressed in either outside reading or presentations associated with the module/week.

H. Tests (2)

The student will take a midterm and final test. Each test will contain 140 multiplechoice and essay questions and must be completed in 2 hours. The tests are openbook/open-notes and will cover the content presented through the readings and assignments.

## VI. COURSE GRADING AND POLICIES

A. Point

Course Requirements Checklist		10	
Discussion Board Forums (3 at 50 pts ea)			150
Deleted Files Forensics Paper			100
Term Paper	-		
Topic Submission			10
Bibliography			20
Outline			20
<b>Final Submission</b>			100
Hashing Files Project			100
Quizzes	(4 at 50 pts each)		200
Tests	(2 at 150 pts ea)		300
	- · ·	Total	1010

B. Scale

A = 900–1010 B = 800–899 C = 700–799 D = 600–699 F = 0–599 CJUS Policy

C. CJUS Policy

The nature of the criminal justice community demands that persons involved be of a high level of integrity, and education is not merely academic in nature, but is holistic. Students enrolled in CJUS courses will be held to a high standard. Selfcontrol is imperative for CJUS practitioners. If not "merely" to honor Christ, your family, and this academic institution, on a purely pragmatic level, in anticipation of future employability in the career field of your choice, conduct yourselves so as not to place yourselves in difficult and embarrassing situations.

D. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at <u>LUOODAS@liberty.edu</u> to make arrangements for academic accommodations. Further information can be found at <u>www.liberty.edu/disabilitysupport</u>.



# **COURSE SCHEDULE**

# **CJUS 363**

Module/ Week	<b>R</b> eading & Study	Assignments	POINTS
1	Nelson et al.: chs. 1–2 1 presentation	Course Requirements Checklist Class Introductions DB Forum 1 Quiz 1	10 0 50 50
2	Nelson et al.: chs. 3, 5 2 presentations	Deleted Files Forensics Paper Term Paper: Topic Submission Quiz 2	100 10 50
3	Nelson et al.: chs. 4, 6	DB Forum 2 Term Paper: Bibliography Quiz 3	50 20 50
4	Nelson et al: ch. 9 2 presentations	Term Paper: Outline Test 1	20 150
5	Nelson et al: ch. 11 1 presentation 1 website	Term Paper: Final Submission Quiz 4	100 50
6	Nelson et al.: chs. 12–13 2 presentations 2 websites	DB Forum 3	50
7	Nelson et al.: chs. 8, 14 2 presentations	Hashing Files Project	100
8	Nelson et al.: ch. 15 1 presentation	Test 2	150
TOTAL			

DB = Discussion Board

**NOTE**: Each course module/week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final Module/Week ends at 11:59 p.m. (ET) on **Friday**.