

**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 not be used to purchase course materials.**

## ***COURSE SYLLABUS***

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### **CSIS 440**

#### **DIGITAL FORENSICS**

#### **COURSE DESCRIPTION**

Students are introduced to the concept of computer crimes and the need for forensics specialists (people who know how to find and follow the evidence). Systems Forensics, Investigation, and Response begins by examining the fundamentals of system forensics, the role of computer forensics specialists, computer forensic evidence, and application of forensic analysis skills. It also gives an overview of computer crimes, forensic methods, and laboratories. It then addresses the tools, techniques, and methods used to perform computer forensics and investigation. Finally, it explores emerging technologies as well as future directions of this interesting and cutting-edge field. (Formerly BMIS 440)

#### **RATIONALE**

This course is an introduction designed to familiarize the student with current approaches to computer, digital, and cyber related forensics techniques and to 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 [Academic Course Catalog](#).

#### **II. REQUIRED RESOURCE PURCHASE**

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

#### **III. ADDITIONAL MATERIALS FOR LEARNING**

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended)
- C. Blackboard [recommended browsers](#)
- D. Microsoft Word

#### **IV. MEASURABLE LEARNING OUTCOMES**

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

- A. Demonstrate general knowledge and comprehension of digital forensic sciences as a profession.
- B. Demonstrate knowledge and comprehension of basic tools and techniques used in the field of computer forensics sciences.
- C. Evaluate an emerging issue in computer and cyber forensics, analyze the position or arguments around the issue, and present his/her knowledge in a written logical professional manner.
- D. Participate in a cyber crime investigation by developing and documenting procedures, following evidence handling protocols, documenting extraction, and presenting findings in a legally acceptable manner for use as evidence in a criminal or civil case.
- E. Articulate a biblical worldview of computer sciences and the legal profession.

#### **V. COURSE REQUIREMENTS AND ASSIGNMENTS**

- A. Readings and presentations
- B. Course Requirements Checklist  
After reading the Course Syllabus and [Student Expectations](#), the student will complete the related checklist found in Module/Week 1.
- C. Discussion Board Forums (8)  
Discussion boards are collaborative learning experiences. Therefore, the student will participate in eight Discussion Board Forums. Threads must be at least 300 words integrating two biblical principles. In addition to the thread, the student must reply to at least two other classmates' threads. Each reply must be at least 150 words.
- D. Exams (4)  
The student will participate in four exams, each dealing with a different aspect of digital forensics.
- E. Labs (8)  
The student will submit eight labs, each dealing with a different aspect of digital forensics.

**VI. COURSE GRADING AND POLICIES**

A. Points

Course Requirements Checklist	10
Discussion Board Forums (8 at 35 pts ea)	280
Exams (4 at 80 pts ea)	320
Labs (8 at 50 pts ea)	400
<b>Total</b>	<b>1010</b>

B. Scale

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

C. Disability Assistance

Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at [LUOODAS@liberty.edu](mailto:LUOODAS@liberty.edu) to make arrangements for academic accommodations. Further information can be found at [www.liberty.edu/disabilitysupport](http://www.liberty.edu/disabilitysupport).

## ***COURSE SCHEDULE***

### **CSIS 440**

<b>MODULE/ WEEK</b>	<b>READING &amp; STUDY</b>	<b>ASSIGNMENTS</b>	<b>POINTS</b>
<b>1</b>	MindTap Module 1 <i>Introduction, Lab Composition, Investigative Process</i>	Course Requirements Checklist	10
		DB Forum 1	35
		Module 1 Lab	50
<b>2</b>	MindTap Module 2 <i>First responder Procedures, incident Handling, Investigative Reports</i>	DB Forum 2	35
		Module 2 Exam	80
		Module 2 Lab	50
<b>3</b>	MindTap Module 3 <i>File Systems and Hard Disks, Digital Media Devices, Boot Processes</i>	DB Forum 3	35
		Module 3 Lab	50
<b>4</b>	MindTap Module 4 <i>Windows and Linux Forensics</i>	DB Forum 4	35
		Module 4 Exam	80
		Module 4 Lab	50
<b>5</b>	MindTap Module 5 <i>Steganography, Data Acquisition, EnCase</i>	DB Forum 5	35
		Module 5 Lab	50
<b>6</b>	MindTap Module 6 <i>Data Recovery, Image File Forensics</i>	DB Forum 6	35
		Module 6 Exam	80
		Module 6 Lab	50
<b>7</b>	MindTap Module 7 <i>Log Investigation, Network Traffic Analysis</i>	DB Forum 7	35
		Module 7 Lab	50
<b>8</b>	MindTap Module 8 <i>DoS Attacks, Internet Crime, Corporate Espionage</i>	DB Forum 8	35
		Module 8 Exam	80
		Module 8 Lab	50
<b>TOTAL</b>			<b>1010</b>

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**.