

CRJ 460/560 – Survey of Technology and Crime
FSC 450/550 – Computer Forensics
Spring 2005

Instructor: Bobby Moore, Ph.D.
Course Time: MWF: 11:00 to 11:50
Phone: 846-4073
E-mail: bemoore@deltastate.edu
Webpage: http://ntweb.deltastate.edu/vp_academic/bmoore
Office: Kethley 202B
Office Hours: MWF: 8:00 to 9:00; 10:00 to 11:00; 2:15 to 3:00
Wednesday: 4:00 to 5:00
Tuesday and Thursday by Appointment

Textbooks: No textbook is required for this course. However, it is up to the student to print out a small training manual that will be used throughout the section on computer forensics. Additionally, the student will be responsible for a series of outside readings.

COURSE GOALS AND OBJECTIVES

This course is a dual course offering. The first half of this semester the course will cover topics associated with the uses of technology in criminal activity. After spring break the course will shift its focus to more of an emphasis on computer forensics and the presentation of digital evidence in court. By the end of the semester each student will:

- Understand the history and development of technology assisted crimes, including hacking, identify fraud, digital child pornography, cyberstalking, and online fraud.
- Understand how the law has been interpreted by the courts when dealing with technology-assisted crimes
- Understand some of the problems associated with applying traditional legal doctrine to the realm of cyberspace
- Become familiar with the basic procedures of seizing a computer and preparing evidence for forensic analysis
- Become familiar with the basic components of the computer and other technological devices likely to be encountered in technological investigations.
- Understand the basics of computer forensics, including how to locate files stored on hard drives (including slack space), floppy drives, and flash drives.
- Be familiar with how to present computer evidence into trial with authentication and verification of evidence integrity.

CLASSROOM ATTENDANCE AND PARTICIPATION

This course is a split-level senior and graduate level course, and as such it is expected that the student is capable of determining whether he or she should attend class.

However, the University's rules and regulations require that a student attend at least 75% of class meetings in order to receive credit for the course. With this in mind, each student will be given 8 absences, which will include both excused and unexcused absences. Each subsequent absence will result in the student receiving a penalty of one letter grade. Any

student missing more than 11 classes will be given an automatic grade of “F” for the course. Additionally, participation in class discussions will be instrumental in the student’s understanding of the course materials. Failure to attend class may result in the student being unable to adequately discuss materials on the examinations.

TARDINESS

An individual entering the classroom after class has begun is not only disrupting for the instructor, it is also disrupting for other students. If you arrive to class late and the door is already closed, then do not interrupt the class by coming in. Arriving late will still count as one of your allotted absences. If you have a continuous problem that will result in your being late for class, please see the professor as soon as possible.

GRADING

Each student’s grade for this course will be computed using a combination of test scores and the student’s grade on an assigned research paper.

EXAMS:

There will be two examinations in this course. Each examination will consist of 100 points, with the first examination covering the materials associated with technology and criminal activities. The final examination will cover the materials associated with the computer forensics process. Each examination will consist of 30 multiple choice questions, 10 short answer questions, and one essay question based on an actual criminal scenario involving the use of technology and crime (the final will contain a scenario involving a forensic examination).

RESEARCH PAPER:

Each student will select a topic that is associated with high technology crime and/or computer forensics that is of interest to them. This research paper may be an in-depth examination of either a particular technology-assisted crime, a legal issue associated with the investigation of a high-technology crime, the use of a computer forensics analysis program, or any other closely related topic that is approved by the professor. To ensure that there is no confusion about what is an acceptable topic, each student will submit a brief synopsis (a typed abstract of less than one page indicating what the student will write their paper on, as well as what resources they intend to use, etc.) of their intended research paper no later than February 11, 2005. Additionally, to assist students who have a propensity for continuously putting off the writing of their research papers, each student will submit a copy of their reference page (listing of all books, articles, websites, etc.) to the professor no later than April 1, 2005. Failure to submit either of these assignments on a timely basis will result in reductions to the student’s final grade on the paper. The final paper will be due to the professor no later than April 22, 2005.

Undergraduate Requirements:

Undergraduate students will complete a 12 to 15 page paper (does not include title page and abstract but does include reference page). This

paper must be written in either Times New Roman (should be close to 12 pages) or Ariel font (must be closer to 15 pages). The margins will be 1.25 left and 1.00 top, right, and bottom. The paper will be double spaced and will contain no spaces greater than 2.0. Undergraduate papers must have a minimum of 10 sources, no more than 5 of which may be electronic (NOTE: The professor will allow the use of EBSCOHOST without considering this to be one of the 5 electronic sources). This research paper must be completed in the APA format and will be graded on: content (what information is provided), grammar (punctuation, verb usage, etc.) and APA format (how well the paper adheres to the APA format. The paper is worth 150 points to the undergraduate student's final grade.

Graduate Requirements:

Graduate students will complete an 18 to 20 page paper (does not include title page and abstract but does include reference page). This paper must be written in Times New Roman with margins of 1.25 left and 1.00 top, right, and bottom. Graduate papers must have a minimum of 15 sources, no more than 8 of which may be electronic (NOTE: As in the case of undergraduate papers, EBSCOHOST does not count as an electronic source). This research paper will be graded on: content (what information is provided), grammar (punctuation, verb usage, etc.) and APA format (how well the paper adheres to the APA format. The paper is worth 180 points to the graduate student's final grade.

ACADEMIC DISHONESTY

Any student caught cheating on an examination or plagiarizing their final paper will receive a grade of "F" for the course. Additionally, the student will be referred to the Dean of Student Affairs, with the possibility of the student being dismissed from their academic program and/or dismissal from Delta State University. Any student who is uncertain of what plagiarism is should contact the professor when they begin working on their research paper. The policy on plagiarism is one of zero tolerance. Any plagiarism will result in an "F" for the course.

GRADING SCALE:

Undergraduates:

315 to 350 points – A

280 to 314 points – B

245 to 279 points – C

210 to 244 points – D

< 210 points - F

Graduates:

342 to 380 points – A

304 to 341 points – B

266 to 303 points – C

228 to 265 points – D

< 228 points – F

STUDENTS WITH DISABILITIES

If a student has a disability that qualifies under the Americans with Disabilities Act and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures.

Tentative Schedule
Spring 2005

Week One:

January 10 through 14

Wednesday - Introduction to the course and the Instructor

Friday – Introduction to high technology crime and the problem of computer-assisted criminal behavior

Week Two:

January 17 through 21

The Crimes of Hacking and Phreaking

Week Three:

January 24 through 28

Identity Crime – Techniques and Responses

Week Four:

January 31 through February 4

Digital Child Pornography – Techniques and Responses

Week Five:

February 7 through 11

Monday – Freedom of Speech on the Internet

Wednesday – The Crime of Cyberstalking and Electronic Harassment

Friday – Tracing Electronic Communications

Week Six:

February 14 through 18

Introduction to Cyber Criminology – Why do individuals commit technology-assisted crime?

Week Seven:

February 21 through 25

Investigating Technology Assisted Crime

Staffing a Computer Response Team (Pros and Cons)

Week Eight:

February 28 through March 4

Drafting a Search Warrant and Warrantless Search Doctrines Involving Computers

Week Nine:

March 7 through 11

Seizing a Computer and Other Technological Devices

Week Ten:

March 14 through 18

Examination One on Monday

No Class on Wednesday

Friday – Introduction to the Field of Computer Forensics

Week Eleven:

March 21 through 25

No Class Spring Break

Week Twelve:

March 28 through April 1

Monday – How Files are Stored on Computer Storage Media – The Value of Evidence from Slack Space

Wednesday – Imaging Suspect Media and Preparing for the Forensic Examination

Friday – Introduction to EnCase Computer Forensics Software

Week Thirteen:

April 4 through 8

Monday - Examining the Suspect Drive for Graphical Evidence

Wednesday – Conducting a Keyword Search of the Drive

Friday – Utilizing E-Scripts to Search for Evidence on the Suspect Drive

Week Fourteen:

April 11 through 15

Conducting GREP Searches for E-Mail Addresses, Numerical Evidence, Etc.

Week Fifteen:

April 18 through 22

Searching Techniques

Week Sixteen:

April 25 through 29

Searching Techniques

Week Seventeen:

May 2 through May 6

Preparing a Report and Presenting Forensic Evidence to the Investigator

Week Eighteen:

May 10 through 14

Final Examination