ISM 4930 Fall 2015 Syllabus

General Course Information

CRN  80696

Course Title  Topics in IS: Computer Forensics / Digital Evidence Analysis

Description  Teaches students how to understand and decipher the complexities of digital and multimedia evidence. The course walks students through the proper legal procedures for acquiring, analyzing, and storing digital and multimedia evidence. The course also instructs the student in the proper procedures to correctly conduct digital forensics on common operating systems, file systems, and associated applications.

College  Lutgert College of Business

Subject Area  ISM-Info. Systems Mgmt.

Course Number  ISM 4930

Credit Hours  3

Meeting Information

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Days</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Aug 19, 2015</td>
<td>Dec 01, 2015</td>
<td>T</td>
<td>06:30 pm - 09:15 pm</td>
<td>LH 2210</td>
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<tr>
<td>Exam Dec 8, 2015</td>
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<td>5:45pm to 8pm</td>
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Prerequisites  CGS1100 and ISM 3230 or COP 1500 and COP 2006

Course URL  http://canvas.fgcu.edu

Distance Learning/Off Campus Course Information

Is this a DL Course?  No, it is an on-campus course. Canvas will be used to submit assignments, for course email, and to post course notes.

Instructor Information

Instructor  Mark Pendergast

E-Mail Address  mpenderg@fgcu.edu

(Please use this email address for all course correspondence. Canvas does not have a reliable messaging system.)

Phone Number  (239) 590-7361

Home Page  http://ruby.fgcu.edu/courses/mpenderg

Office Location  Lutgert Hall 3328

Office Hours  Tues, Wed 3 pm to 6 pm or by appointment

Additional Information

Online Tutorials  Information on online tutorials to assist students is available online at http://www.fgcu.edu/support/

Canvas Learning Management System and Demonstration Site  Information on Canvas is available online at http://canvas.fgcu.edu

Library Resources

Main page:  http://library.fgcu.edu/

Tutorials & Handouts:  http://library.fgcu.edu/BSD/Instructor/tutorials.htm

Research Guides:  http://fgcu.libguides.com/

Faculty Support:  http://library.fgcu.edu/faculty_index.html

Contact Us:  http://library.fgcu.edu/BS/about/contactus.htm

Course Materials

Required Course Materials  Required textbook:  Digital Archaeology, Michael W. Graves, Addision Wesley, 2014, ISBN 978-0-321-80390-0 (only the textbook is required from the publisher. No supplements or course codes)

Software  - Sleuthkit, Autopsy, and FTK Imager (free, instructions will be given in class). Others TBD.

Hardware  - Thumb drive dedicated to this course (8 GB or better)
Course Policies, Learning Objectives, and Agenda

Prerequisite knowledge
You are expected to know how to install and run common Windows and Web applications; how to manage files, directories, and disks in a Windows environment; how to program in Java, C, C# or C++.

Grading, Attendance, and Other Policies

Attendance:
Students are expected to attend every class session. It is the student's responsibility to get course notes from fellow students should they have to miss a class. Cell phones must be turned off before coming to class. Bringing food or drink to class or office hours is strictly prohibited.

Grading:

<table>
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<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>30%</td>
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<tr>
<td>Homework and projects</td>
<td>20%</td>
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<tr>
<td>Exam 1</td>
<td>10%</td>
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<tr>
<td>Exam 2</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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<tr>
<td>Participation</td>
<td>5%</td>
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Grading Scale:

- 90-100% A
- 80-89% B
- 70-79% C
- 60-69% D
- 0-59% F

+ and - grades may be given to borderline students at the discretion of the instructor.

Late Assignments:
Late assignments will be penalized 10% per week. No assignment will be accepted more than 2 weeks after its due date.

Makeup Exams:
Makeup exams may be given in the case of student's illness or family emergency only. The student must make every effort to contact the professor prior to the exam if they cannot take the exam at its scheduled time. Quizzes and in class assignments cannot be made up.

“Credit hour” statement (developed by the LCOB):
For each credit of a class, you should expect to spend one hour in class and an average of 2 hours preparing outside of class each week. Therefore, since this is a 3-credit class, you should plan to devote an average of nine hours a week to this class.

Mandatory Confirmation of Attendance Assignment:
To comply with federal laws regarding financial aid, every course must have a mandatory assignment for students to complete during the first week of classes. FGCU has chosen to implement this requirement by asking professors to add a simple assignment to Canvas to indicate that the student has participated. In our case, all you need to do is to make one post to the Confirmation of Attendance Discussion (first module). You must complete this assignment even if you do not receive financial aid.

Academic Dishonesty/Cheating Policy
All homework unless otherwise specified should be the student's own work. If you turn in someone else's work, then you will lose double points for that assignment. If you allow someone else access to your work, then you will lose all points for that assignment.

What is NOT OK (that is, cheating):
- working with another student and turning in the same assignment
- emailing or posting your working assignment to allow someone else to "just see how you did it"
- copying someone else's assignment, or copying a assignment from a book or the internet

What is OK:
- explaining to another student what mistakes they made
- discussing how to approach an assignment
- asking your professor for help in person or via email

Learning Objectives

Content Knowledge
- Explain the rules for digital evidence.
- List procedures for acquiring and storing digital evidence
- Explain how to locate and recover data from a hard drives, servers, and mobile devices
- Know how to analyze email, browser, and graphic file data
- Understand the basics in case management and report writing.
Critical Thinking

- Describe how to prepare for digital evidence investigations and explain the differences between law enforcement agency and corporate investigations.
- Understand and explain how computer crime can harm a business

Course Outline

Part 1 Legal Aspects
- Ch 1 Anatomy of a Digital Investigation
- Ch 2 Laws Affecting Forensic Investigations
- Ch 3 Search Warrants and Subpoenas
- Ch 4 Legislated Privacy Concerns
- Ch 5 Admissibility of Evidence

Part 2 Evidence
- Ch 6 First Response and the Digital Investigator
- Ch 7 Data Acquisition
- Ch 8 Finding Lost Files

Part 3 Analysis
- Ch 9 Document Analysis
- Ch 10 Email Forensics
- Ch 11 Web Forensics
- Ch 14 Mobile Device Forensics

Part 4 Antiforensics and E-Discovery
- Ch 15 Fighting Anti-Forensics
- Ch 16 Litigation and Electronic Discovery

Part 5 Case Management and Tools
- Ch 17 Case Management and Report Writing
- Ch 18 Tools of the Digital Investigator

Parallel to book work, lectures will be given on file system fundamentals and other technical aspects not covered in other courses.

Chapter reading and assignment schedules are posted in Canvas.

Important Dates
- Aug 25 - First class meeting
- Oct 6 - Midterm 1 exam
- Nov 3 - last day to drop without academic penalty
- Nov 24 - Midterm 2
- Dec 1 - last day of class, last day assignments will be accepted
- Dec 8 - Final Exam

University Statements:

Academic Behavior Standards and Academic Dishonesty

All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty can be found in the FGCU Student Guidebook under the Student Code of Conduct and Policies and Procedures sections. All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at http://studentservices.fgcu.edu/judicialaffairs/new.html

Disability Accommodations Services

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university's guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please contact the Office of Adaptive Services. The Office of Adaptive Services is located in Howard Hall 137. The phone number is 239-590-7956 or TTY 239-590-7930

Student Observance of Religious Holidays

All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.