MASTER COURSE SYLLABUS

Date: December 10, 2008

Course Number: MIS 563

Course Title: Computer Forensics

Instructors: Liu

Typical Textbook: Guide to Computer Forensics and Investigations

Catalog Description: Examines computer forensics and investigations. It looks at the
                               problems and concerns related to computer investigations. It blends
                               traditional investigation methods with classic systems-analysis problem-
                               solving techniques and applies them to computing investigations. It
                               implements common computer forensic tools in real-life scenarios.
                               Lab fee $90.

Prerequisites: MIS 501

Course Objectives: Be able to correctly identify the components in a computer investigation
                               and proper investigation procedures. Be able to use computer forensic
                               tools correctly in criminal and civil investigations. Be able to gain hand-
                               on experience on using various forensic software such as DriveSpy,
                               Image, AccessData Forensic ToolKit (FTK), Hex Workshop, X-Ways
                               Forensics and Steganography tools. Be able to make intelligent,
                               reasonable, and thoughtful analysis regarding computer intrusions and
                               crimes.

Subject Matter:　　　　　　14 sessions at 160 minutes each plus a final exam

Topic Number	Topic Title	Number of Sessions on Topic
1.	Computer Forensics and Investigations as a Profession	1
2.	Understanding Computer Investigations	1
3.	Working with Windows and DOS Systems	1
4.	Midterm 1	1
5.	Current Computer Forensics Tools	1
6.	Digital Evidence Controls	1
7.	Processing Crime and Incident Scenes	1
8.	Data Acquisition	1
9.	Midterm 2	1
10.	Computing Forensic Analysis	1
11.	E-mail Investigations,	1
12.	Recovering Image Files	1
13.	Written Investigation Reports Becoming an Expert Witness	1
14.	Research Paper Presentation	1
15.	Final	1

Active Student
Involvement:　　　　　　Please describe how the course actively involves or engages students in the learning process; for example, projects, papers, assignments, case discussions, use of computer lab, presentations, etc.

This course demands extensive use of computer lab: hands-on exercises and hands-on case studies immediately follow the instructor's lecture in each class session. Through the semester, students are expected to complete three assignments, applying the skills and the knowledge learned from the class to resolve real-life problems. Students are also required to write a research paper and present their research results at the end of the semester.

Describe how the course addresses the following topics or state that it does not:

- Global Business Environment: Network security is by nature a global issue since networks cross organizational and national boundaries and security risks can be located anywhere there is network access.

- Ethics: This is an important topic in any security course because security is not only a technology issue but also a people and procedural issue.