

**Oklahoma State University  
William S. Spears School of Business**

**Information Assurance Management**

TCOM 5223, MSIS 4223

Spring 2008

Thursday 4:30 – 7:10 PM (Central Time)

Location: Tulsa – North Hall 222      Stillwater – MSCS 310

**Faculty**

Instructor: Charles G. Gray

Office Hours (Tulsa): Monday, 12:00 PM – 4:00 PM  
Thursday, 7:00 AM – 11:00 AM

Stillwater and other hours by appointment

Graduate Assistant: Mr. Chirag Joshi

Class web page: [I B A](#)

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**Course Description**

Security is not something we want to have to pay for. It would be nice if we didn't have to worry about protecting our data from disclosure, modification or destruction from unauthorized individuals or governments. However that is not the environment that we find ourselves in. Information security in the current context is a relatively new concept. The history of information technology development over the past half century, and increasingly over the past 15 years, has altered the way that information can be created, transmitted, used, and abused. The days of just "locking up the computer room" are gone forever, as businesses and individuals struggle to strike a balance between adequate information system controls and system usefulness. This course presents the student with an understanding of the issues of information security from the perspective of MIS. The material covered will include offensive and defensive information operations, information security on the Internet, leadership development for information security professionals and information security as it relates to electronic commerce./

**Important Dates**

- Jan 10, 2008 Class begins (Come prepared to work the full period)
- Jan 17 "Get acquainted" form due to me via e-mail
- Jan 24 Term paper abstract due (TCOM 5223 students only)
- Feb 28 Mid-term exam. 4:30 to 6:20 PM in the regular classroom
- Apr 17 Term papers due (TCOM 5223 only)
- May 1 Final examination. 6:00 to 7:50 PM in the regular classroom

**Teaching Mode**

Most presentations will be accompanied by MS PowerPoint slides. Every effort will be made to post presentation materials on the class Web page no later than noon on the class meeting day. Paper copies will be provided in class **only** if the materials have not been posted on time. Some guest speakers may be included in the program, and all of the material they present is subject to being on an exam/quiz. Current events will be emphasized, and students should feel free to contribute their findings from both the popular and trade press. Current events may be included in examinations. E-mail will be

used extensively for faculty/student communications. E-mail without the course number in the subject line MAY be filtered and discarded as "spam".

## **Exams, Homework and Major Assignments**

The mid-term examination will cover material through session 7, and may consist of True/False, multiple choice, matching, and/or short essay questions. It will be open book and open notes (your own), but no Palm Pilots, cell phones, or similar PDA (electronic) devices will be allowed on the desk. The final examination will emphasize the second half, and may consist of True/False, multiple choice, matching, and/or essay questions. It will be open book and open notes, but no Palm Pilots or similar PDA devices will be allowed. Laptop computers may be used for the mid-term and final exams provided that any wireless access is disabled.

Quizzes may be used throughout the course to evaluate students' learning of the relevant concepts, and to evaluate their completion of the assigned reading materials.

Periodically you will be assigned to find an article related to information security and write a one-page summary, including its significance to information assurance. Include a complete citation.

Other short written assignments may be made to clarify concepts or judge student progress with the subject material.

It is expected that students will complete all reading assignments prior to the relevant class session.

### **For students enrolled in TCOM 5223 only:**

A term paper with a minimum of 15 pages (excluding the table of contents and any attachments, 1.5 line spacing), 12-point type, including a minimum of five applicable references and citations will be required. I do not consider "*Wikipedia*" as a reliable source for academic research. The paper can be on any topic related to information assurance; however, the instructor must approve the subject in advance. The term paper may take the form of a case study. A one-page abstract (summary) outlining the topic is due on 24 January 2008. Failure to timely submit the abstract will result in a ten-point reduction in the final paper grade. The final term paper is due prior to class on 17 April 2008.

## **Assignment Details**

Assignments will require you to have a computer with Internet access. The instructor is not liable for any loss of material submitted. Please keep a back-up copy of all material that you submit. Do not submit electronic media that may contain confidential information (e.g., from your employer), since its safety, security against loss, destruction or tampering cannot be guaranteed by the instructor. The student is responsible to take all steps to protect information that you consider to be "mission critical" for yourself.

An e-mail receipt will be provided for each assignment – save your work until you receive the receipt.

## **Attendance**

Regular class attendance is expected, and will be vital to learning the material. Students are reminded that the class material assigned and presented in class often requires further explanation for complete comprehension. A "sign in sheet" will be available at the beginning of each class period for students to sign and note their time of arrival. If you do not sign in, my records will indicate that you are absent.

## Grading Procedures

| Grading will be as follows: | Percentage of Semester Grade |           |
|-----------------------------|------------------------------|-----------|
|                             | MSIS 4223                    | TCOM 5223 |
| Quizzes and homework        | 40%                          | 35%       |
| Mid-term examination        | 30%                          | 20%       |
| Final examination           | 30%                          | 20%       |
| Term paper (TCOM 5223 only) |                              | 25%       |

Late papers or homework will be accepted at a cost of **one letter grade per calendar day(or portion thereof) past due**. Assignments are “past due” if not submitted prior to the time specified on the due date. Students missing an exam without notifying the instructor in advance can expect to receive a zero. Employed students missing an exam or quiz due to business requirements will be evaluated on a case-by-case basis, but typically will take the original exam/quiz upon returning. At the instructor’s option, make-ups may be available in other cases, but will be more difficult. Any questions about grades must be brought to the attention of the instructor within seven calendar days of receiving the grade. No grade changes will be considered after seven days.

Semester grades will be based on:

|   |              |  |
|---|--------------|--|
| A | 90-100%      | Exceptional grasp and insight          |
| B | 80-89%       | Substantial grasp, significant insight |
| C | 70-79%       | Essential grasp, partial insight       |
| D | 60-69%       | Minimal grasp, weak insight            |
| F | 59% or below | Inadequate grasp or insight            |

**NB:** Demonstrated overall effort will be a factor contributing to the grade of all assignments. The instructor reserves the right to award extra points on any assignment where exceptional effort is evident.

## Academic Integrity Policy

Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration on homework or assignments, plagiarism, multiple submissions of the same assignment, cheating on examinations, fabricating information, helping another person cheat, having unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge. Contact the Office of Academic Affairs, 101 Whitehurst, (405) 744-5627. See also <http://academicintegrity.okstate.edu>.

It is expected that all work submitted (papers, analyses, quizzes, examinations, homework, etc.) will be the student’s **individual work**. It is intended for candidates for the Master’s Degree to refer to journals and other relevant outside sources, evaluate their findings in light of the current scenario, draw appropriate conclusions from their research, and then present their conclusions in a straightforward and convincing manner. Reference to resources on the Internet (with proper citation) is acceptable, but “copy and paste” **IS NOT** acceptable.

The English language is important in the information technology industry, and it is important in this class. Grammar, usage and spelling in all student work will be graded.

### **Students with Disabilities**

According to the Americans with Disabilities Act, it is the responsibility of each student with a disability to notify the University of his or her disability and to request accommodations. If any member of this class feels that he or she has a disability and needs special accommodation of any nature whatsoever, the instructor will work with you and the OSU-Tulsa Office of Student Disability Services to provide reasonable accommodations to ensure that you have a fair opportunity to perform in this class. Please advise the instructor of such a disability and the desired accommodations at some point before, during or immediately after the **first scheduled class period**.

### **Textbook**

#### **The required textbook is:**

Cothren, White, Williams, and Davis; Principles of Computer Security: Security + and Beyond. 1<sup>st</sup> ed. © 2005 McGraw-Hill Technology Education. ISBN 0-07-225509-9

### **Style Manual for papers** (homework, term paper, etc.)

Gibaldi, Joseph. MLA Handbook for Writers of Research Papers, 6<sup>th</sup> Edition, © 2003, The Modern Language Association, ISBN 0-87352-986-3

**See especially Chapter 2 on plagiarism.**

### **Optional References**

Singh, Simon. The Code Book: The Science of Secrecy from Ancient Egypt to Quantum Cryptography. © 1999 Random House. ISBN 0-385-49532-3.

Whitman, Michael E. and Herbert J. Mattord. Management of Information Security, © Thompson Learning, Inc. ISBN 0-619-21515-1.

**TCOM 5223/MSIS 4223 – Information Technology Risk Management – Tentative Class Schedule,  
Spring 2008\***

| <b>Session</b> | <b>Date</b> | <b>Assignments</b> | <b>Lecture Topics</b>   | <b>Textbook Readings</b> |
|----------------|-------------|--------------------|---|--------------------------|
| 1              | Jan 10      |                    | Introductions, course/syllabus review<br>Security Trends, General Security Concepts | Ch. 1, 2                 |
| 2              | Jan 17      |                    | Operational/organizational security<br>The Role of People in Security               | Ch. 3<br>Ch. 4           |
| 3              | Jan 24      |                    | Cryptography<br>Public Key Infrastructure   | Ch. 5<br>Ch. 6           |
| 4              | Jan 31      |                    | Standards and Protocols   | Ch. 7                    |
| 5              | Feb 7       |                    | Physical and Network Security<br>Network Fundamentals                               | Ch. 8<br>Ch. 9           |
| 6              | Feb 14      |                    | Infrastructure Security   | Ch. 10                   |
| 7              | Feb 21      |                    | Remote Access   | Ch. 11                   |
| 8              | Feb 28      |                    | Mid-term exam   | Open book/notes          |
| 9              | Mar 6       |                    | Wireless and Instant Messaging<br>Intrusion Detection Systems                       | Ch. 12<br>Ch. 13         |
| 10             | Mar 13      |                    | Security Baselines<br>Attacks and Malware   | Ch. 14<br>Ch. 15         |
|                | Mar 20      |                    | <b>SPRING BREAK – NO CLASS</b>  |                          |
| 11             | Mar 27      |                    | E-mail  | Ch. 16                   |
| 12             | Apr 3       |                    | Web Components<br>Software Development  | Ch. 17<br>Ch. 18         |
| 13             | Apr 10      |                    | DRP/ BCP and Organizational Policies<br>Risk Management                             | Ch. 19<br>Ch. 20         |
| 14             | Apr 17      |                    | Change Management<br>Privilege Management   | Ch. 21<br>Ch. 22         |
| 15             | Apr 24      |                    | Computer Forensics<br>Security and Law  | Ch. 23<br>Ch. 24         |
| 16             | May 1       |                    | Final Exam (1800 – 1950 – normal classroom)   | Open book/notes          |

\*NOTE: Due to variable class discussion times, topics may shift to later dates, but I will make every effort to maintain the sequence outlined here.