ISM 676: Information Security and Privacy
Bryan School of Business and Economics
Department of Information Systems and Supply Chain Management
Spring 2018 Syllabus

Instructor: Dr. Hamid Nemati
Office: 425 Bryan Bldg.
Office Phone: (336) 334-4993
E-mail: nemati@uncg.edu
Office Hours: By appointment

Catalogue Course Description:
Study of the technical, formal and informal controls to provide systems security and information privacy for organizations. Includes security analysis of technology and organizational systems for information assurance.

Detailed Course Description and Objectives:
This is an introductory course in information security and privacy. The course will provide students with an in-depth understanding of technical and managerial issues of information security and privacy. The course achieves this by discussing foundational aspects of a wide spectrum of activities, methods, methodologies, procedures and best practices used in information security and privacy field. Upon successful completion of this course, the students will be able to:
- Analyze impact of systems security and information privacy for organizations
- Understand the broad role of information security and information privacy in business processes
- Understand the technical foundations for information security and information privacy.
- Study the implications for information security and privacy in Enterprise Information Systems and Inter-Organizational business processes.
- Understand the issues in managing the security and privacy of Information Systems.
- Understand how to assess and mitigate the risks and vulnerabilities in systems
- Identify and prioritize information assets
- Identify and prioritize threats to information assets
- Define an information security and privacy strategies and architecture
- Plan for and respond to intruders in an information system
- Describe legal and public relations implications of security and privacy issues

Grade Evaluation:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Assignments (3 @ 15% each)</td>
<td>45</td>
</tr>
<tr>
<td>Exams (1@20% and 1@30%)</td>
<td>50</td>
</tr>
<tr>
<td>Class Participation and Discussion</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

The letter grade is based upon percent of points earned on each item and is calculated as follows:
93-100%=A  90-93%=A-  87-89%=B+  83-86%=B  80-82%=B-
77-79%=C+  73-76%=C  70-72%=C-  Below 70=F

Required Text Book and Other Readings:
There are no text books to be purchased for this course. I thought that would make you happy. Selected portions from the reading list below will be assigned in class and will be posted on Canvas. These
readings are selected from leading academic and practitioner journals and other leading periodicals and research sources.

**Homework Assignments:**
There are three assignments due for this course. The assignments are done individually. Students will be given specific guidance on the amount of collaboration permitted for each assignment. All assignments must be completely the original work of the student submitting them and include proper citations to the published work of others. All assignments are due at the due date stated on the assignment. Assignments turned in after the due date will be counted as late and will be assessed a severe grading penalty. Written assignments not received within 24 hours of the due date will not be accepted and will be given a grade of 0. Use software features to check spelling and grammar, when appropriate. However, DO NOT assume that the software will catch all errors. Please proofread your work carefully. Be sure to cover all assignment parts. Any assignment that requires reword/rework will be assessed at least 20% penalty.

**Exams:**
There will be two examinations. Please see the dates for each exam as appears in the course outline. The content of each exam will come from the material presented in the course with primary emphasis on the topics covered since the last exam. The exams will consist of objective questions and will require a technological comprehension that covers the course material and assigned readings. Exams will be in the format of True/False with justification, multiple choice, and short essay questions. Exams will assess your knowledge of concepts and terms. There will be no make-up examinations. It is the student’s responsibility to arrange for an excused absence before the exam. A grade of zero will be assigned for all exams missed without an excused absence. If an emergency arises on the day of the exam, and the instructor deems that the absence is excused, then a make-up exam will be scheduled.

**Course Participation and On-Line Discussion Forums:**
Although this is an online class, students are expected to be active participants in the course. Students may be asked to participate in on-line discussion forums. Participation in required online discussion forums will be treated as class participation. Full credit for participation will be extended to students who regularly attend Collaborate sessions, post to class discussion forums, ask questions, share observations, and contribute relevant personal experiences. Students are expected to attend Collaborate sessions prepared to think and communicate their thought process. Analysis questions frequently do not have only one correct answer so students should be prepared to defend the conclusions they reach! Students may be required to participate in web-based threaded discussions of questions or issues that are distributed by the instructor. Effective written communication is stressed through written assignments, web discussions, e-mail communications, and short essays on tests. It is expected that all communications are prepared and presented professionally.
## Course Schedule
Subject to Change

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
</table>
| **Weeks 1 and 2** | Introduction to the course  
Information System Security and Privacy: nature and scope  
History of Information Security and Privacy  
Information and Data Privacy  
Security of Technical Systems in Organizations  
Issues in Information Security  
Issues in Information Privacy |
| Week 3 | Internet Communications and TCP/IP  
Network Security, Firewalls and VPNs |
| Week 4 | Information System Risk Management  
Threats and Attacks |
| Week 5 | Cryptography and Encryption |
| Week 6 | The art and science of Hacking  
**Assignment 1 Due.** |
| Week 7 | Intrusion Detection and Prevention Systems |
| Week 8 | Identity Management  
**Exam 1 Due.** |
| Week 9 | Spring Break |
| **Weeks 10 and 11** | Information and data Privacy  
**Assignment 2 Due.** |
| Week 12 | Social Engineering |
| Week 13 | Security and Privacy of Formal Systems in Organizations  
Planning for Information System Security and Privacy  
Designing Information System Security and Privacy  
Corporate Governance for IS Security and Privacy |
| Week 14 | Culture and IS Security and Privacy  
Legal Aspects of Information Security and Privacy  
**Assignment 3 Due** |
| **Weeks remaining** | **Prepare for final exam**  
**Exam 2 Due** |
Disability Statement:
Any student with a documented disability needing academic adjustments is requested to notify the instructor as early in the semester as possible, and must do so before the first exam. The instructor may request verification from the disability office. All discussions will remain confidential.

Instructional Methodology:
This is an on-line class that will utilize readings, assignments, projects, and tests. Students may be asked to engage in group work, participate in discussion forums, and engage in online conferencing.

Oral and Written Communication Content:
Written reports may be required and will be expected to be of very high quality in terms of content, format, and organization. Students will be expected to follow all specific stated guidelines in creating reports.

Electronic Mail and Electronic Communications
Each student will be expected to check his /her electronic mail and the class Canvas site at least once every 48 hours. The student will be responsible for any information or assignments distributed via electronic mail or made available via Canvas. I may post announcements, send emails, and post readings several times each week.

Ethical, Demographic Diversity, Global, Political, Social, Legal, Regulatory, and Environmental Perspectives:
Issues relating to these areas in business and technology will be discussed as they arise in the context of the readings and other course deliverables.

Academic Integrity Policies:
Students in the Bryan School must conform to all existing principles found in UNCG’s Academic Integrity Policy and the Student Code of Conduct. Further details may be found at the following site: http://sa.uncg.edu/handbook/

Expectations of Faculty and Students in the Bryan School:
Students should read the Guidelines for Faculty and Students presented on the web pages found at: http://www.uncg.edu/bae/faculty_student_guidelines.pdf

Course Evaluation
Each student will be asked by the University to complete an on-line course evaluation near the end of the course. This evaluation is important to the University in its efforts to continually improve the delivery of courses. More information about the evaluation will be provided later in the course.

Course Routine and Schedule
To provide some structure to each week of study, we will follow the routine described below:

- On each Monday to Wednesday of a particular week, check the Canvas for that week. You should look for the online of topics for the week, and download and start reading the week’s reading and plan on viewing the multimedia files, etc.
- Attend a WebEx session (if any scheduled for that week). WebEx sessions are typically scheduled for Thursdays at 5:30 PM.
• By **Thursday or Friday** of each week, you should have completed the readings and tutorial and start working on any assignments. In those days, you should look on Canvas a couple of times a day for Discussion Board questions, Blogs and Wikis to read and enter into the interactive exchanges with other students and the instructor. You should post your comments about the week’s readings, assignments or any other questions. If you have not participated in live WebEx session, you should view the recording now.

• On **Saturday or Sunday** of the week, you should be wrapping up your reading and get ready for next week and get ready to submit any deliverables

• On **Monday**, of starting the second week of the course, you should upload your assignment, if any, to Canvas’ and start over.

• I will respond to emails within 24 hours. I will read and post comments when appropriate in the discussion forums each week between Thursday and Sunday midnight. I will check course statistics each Sunday. The Grade book will be updated each Monday at 8 AM. You may access your grade.

**What you need to take this course:**

1. Your readings list and individual articles and readings in that list for each week.
2. You must have access to a computer that connects to the Internet. The course materials are only accessible online by logging in to [canvas.uncg.edu](http://canvas.uncg.edu) - your student identification number is required. If you do not own a computer, the computer labs on campus will be open during this semester.
3. You must have a working e-mail account. Your first assignment will be to update your e-mail address on the course Web site. Instructions are online at [canvas.uncg.edu](http://canvas.uncg.edu) - you must log in to see the course materials.
4. Because of e-mail viruses, Prof. Nemati does not accept e-mail from unknown sources. Therefore, you must use the subject ISM 676 and your full name typed in the message, or the e-mail may be ignored.
5. It’s impossible for Prof. Nemati to be familiar with every software application on the market, so please don’t ask for technical assistance.
6. You must check your e-mail account regularly throughout the semester. Official announcements will be made by e-mail, and on the course Web site at [canvas.uncg.edu](http://canvas.uncg.edu).
7. You are responsible for saving all assignments correctly, so you can turn them in electronically. You should be comfortable using word processing software, and have reasonable keyboarding skills. All assignments will REQUIRE you to use word processing or text editing software. No assignments will be accepted in handwritten form.
8. Supplies: Although you will be publishing (uploading) your assignments, it's a good idea to keep copies of everything.

**A note about you and this course**

Students learn best in quite different ways. One of the advantages of the online format of the course is that it allows students to approach the course in ways that suit their personal styles and preferences. In classrooms, instructors are inclined to teach either as they themselves were taught, or as they think "the average student" prefers. Online, all of the instructor-presented class material is laid out at once, and students can do with it whatever they prefer in order to learn in as personal and unique a fashion as possible.

To understand how you might learn best and how you might approach the course, it's suggested that you complete a learning style inventory, use the information given to figure and interpret your score, and plan your learning strategy accordingly. One good source for determining your learning style is to take this simple online questionnaire: ([http://www.personal.psu.edu/bxb11/LSI/LSI.htm](http://www.personal.psu.edu/bxb11/LSI/LSI.htm)) Another online tool
for determining your personality type can be found using the Keirsey Temperament Questionnaire at (http://www.keirsey.com/sorter/register.aspx).

This course by design specifically accommodates different learning styles by involving a variety of components, including text, video clips, self-check quizzes, reference lists, online discussion, blogs and wikis. Since you are probably used to learning more or less as prescribed or required by a classroom teacher and are not used to designing your own learning strategy, it might take a little time to do that and to settle into a comfortable routine. I think you'll find that as you figure out on your own (and with the help of the online questionnaires mentioned) how to learn the material, everything will fall into place. Online learning, you will find, is quite different than classroom learning. It requires different attitudes, responsibilities, and communication skills.

**Emails:**
- Always include a subject line.
- Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
- Use standard fonts.
- Do not send large attachments without permission.
- Special formatting such as centering, audio messages, tables, html, etc. should be avoided unless necessary to complete an assignment or other communication.
- Respect the privacy of other class members

**Discussion Groups:**
- Review the discussion threads thoroughly before entering the discussion. Be a lurker then a discussant.
- Try to maintain threads by using the "Reply" button rather starting a new topic.
- Do not make insulting or inflammatory statements to other members of the discussion group. Be respectful of other’s ideas.
- Be patient and read the comments of other group members thoroughly before entering your remarks.
- Be cooperative with group leaders in completing assigned tasks.
- Be positive and constructive in group discussions.
- Respond in a thoughtful and timely manner.

**On-line Chats:**
- Introduce yourself to the other learners in the chat session.
- Be polite. Choose your words carefully. Do not use derogatory statements.
- Be concise in responding to others in the chat session.
- Be prepared to open the chat session at the scheduled time.
- Be constructive in your comments and suggestion