MSIS 5283 Secure Information Systems Administration
Course Syllabus - Spring, 2018

Oklahoma State University
Spears School of Business, Management Science & Information Systems

The class schedule and assignments outlined in this syllabus may change as the semester progresses. You must stay current by paying attention to announcements posted on the course website. The grading scheme and other general guidelines will remain constant once the semester starts.

Section(s): Online Learning (OL) - CRN 26830
Class Hour/Location: Weekly lecture video will be posted on Monday every week.
Course Website: Brightspace by D2L: http://online.okstate.edu
http://my.okstate.edu (choose Online Classroom after logging in)
Online Learning Support: Email: spearsonline@okstate.edu
Phone: 405-744-4048
Facebook: https://www.facebook.com/SpearsOnline/

Instructor: Dr. JinKyu Lee, *Ph.D., Assoc. Prof. of MSIS, SSB.*
Instructor Office: Tulsa: NCB 317, Stillwater: GAC (a.k.a. BUS) 426
Office Hours: Anytime via Google Hangouts (voice or video call).
F2F meeting available on Tulsa or STW campus by appointment.
Contact Info: Phone: (918) 594-8254 (Office)
E-mail: **SecureISA@live.com**
Hangouts: **hangouts.google.com** (search key: 9182009072)
** When sending an email/Hangouts message please always include the **course code or name** (MSIS5283 or Secure ISA) and **your first & last name** in the message.*
** Please **NEVER** attach any file to your email. Any email with file attachment will be quarantined without review.*
Follow Google+: https://plus.google.com/+JinLeeOSU
Facebook (optional): www.facebook.com/groups/OSUInfoSec/

Required Textbook: None.
Recommended Ref.: *Corporate Computer Security*, 4th Edition (3rd Ed. also acceptable), Randall Boyle & Raymond Panko, Prentice Hall.
(ISBN-13: 978-0133545197 / ISBN-10: 0133545199)
Any CISSP study guide (e.g., Harris & Maymi from McGraw Hill, Conrad et. al. from Syngress, Steward et. al. from Sybex)

Additional References: Wikipedia, Google, YouTube

Course Prerequisites: None, but can benefit from MSIS5773/TCOM5123 (TCP/IP Upper Layers) or equivalent.

Other Requirements

- Access to a PC (physical or virtual) with admin privileges and convenient Internet access. The standard PC platform for this course is Windows 7/10. If you use a different OS, it is your responsibility to resolve incompatibility issues, if any.
- Basic multi-media authoring tools (e.g., web-cam, smart phone, Camtasia Studio, Windows Movie Maker) and skills.
- Familiarity with virtualization technologies (e.g., VMware vSphere/ESXi, VMware Workstation/Fusion)
- Willingness to put (a lot of) extra time & effort **in addition** to the regular in-class work.

Course Description

MSIS 5283 introduces the students to concepts and technologies relevant to secure information systems and provides hands-on opportunities to familiarize with some system admin tasks and tools necessary to protect information assets in corporate environments.

This course focuses on the defense side of information security and can be taken concurrently with MSIS 5233 Applied Information Systems Security.

The topics covered in this course include, but are not limited to, secure systems design, network protection, host hardening, and various access control mechanisms. Accordingly, students pursuing an information security career or a system/network administrator position will benefit from the theoretical knowledge and hands-on experience earned in this course.

Course Objectives & Learning Goals

Course Objective *By the end of the course, the students are expected to be able to...*	Learning Goals *, which will help the students achieve a higher level of...*
• Identify major components of information systems that need to be secured in a corporate environment.	✓ Information Assurance Competence ✓ Business knowledge and competency
• Perform basic host hardening tasks on major business platforms (e.g., Windows & Linux OS).	✓ Information Assurance Competence ✓ Technology Skills – Telecommunications and Security
• Design & implement security services for corporate IT environments using AD and GPO. • Deploy and configure network defense systems (Firewall, VPN, etc.) that corresponds to business needs.	✓ Information Assurance Competence ✓ Business knowledge and competency ✓ Critical and creative thinking ✓ Technology Skills – Telecommunications and Security
• Effectively exchange technical information, questions, instructions, and suggestions in verbal and written language using online forums.	✓ Communication Skills

Attendance Policy

Initial attendance: Students must review the first lecture video and complete all required tasks before the end of the 2nd week (see course schedule). Students who have not completed the tasks within the first two weeks, unless arranged a different schedule with the instructor, will be reported as not having attended class, and the instructor will recommend the student to drop the course.

On-going attendance: This course is a buffered-synchronous course where all students follow the same course schedule and work together within 2 weeks of time window. Thus every student must keep up with the progress. Accordingly, students are required to watch the video in a timely manner.

* There will be no separate attendance check, but you won't be able to complete assignments in time if you do not keep up with the progress of the class.

* If you have a temporal difficulty in following the course schedule during the semester, you must contact the instructor ASAP and arrange an alternative schedule/make-up plan.

* If you foresee persistent/recurring difficulties in following the course schedule, you may consider taking this course later when your schedule allows.

Grading Policy

Your final grade will be determined by the weighted sum of all grading items, according to the grading scheme below. Each of the grading categories will have one or more grading items. Grading items within one category may or may not have the same weight within the category.

Grading Category	Weight
Video Presentation	**10%**
Online Discussions (on Discussion Boards)	**10%**
Assignments	**40%**
Exams (2 take-home exams)	**40%**
Total	**100%**

Letter grades will be assigned according to the following scale.

Total Weighted Score	Grade
>= 90.00	A
>= 80.00	B
>= 70.00	C
>= 60.00	D
< 60.00	F

* The instructor reserves the right to adjust the scale. A decision to adjust the scale will be made only after all grades are in at the end of the semester. Individual adjustment for a better grade may NOT be requested.

* The total weighted scores will be rounded to the nearest integer at the end of the semester. The calculated total weighted scores will not be manually adjusted. You will be able to check your raw & weighted scores of graded item on the Grade book on Brightspace.

Description of Course Requirements and Grading Rubric

- **Attendance Check:** No separate item (integrated w/ assignments). Some assignments (or some details of them) will be announced during the class and not elsewhere. Missing an assignment deadline will have a significant negative effect on your overall course grade, so please!! watch every lecture video in a timely manner and keep an eye on the announcement board on BrightSpace.

- **Multimedia Presentation:** All students are required to produce a 10~20 minute-long video presentation that features a course-related topic. You need to select a topic closely related to but not (fully) covered in the class, conduct independent research, and transfer your knowledge to the audience using a recorded video presentation. The video must include your voice narration that demonstrates 1) your understanding of the topic and 2) your presentation skills.
  Topic Selection: Each student will propose 3 or more topics. The instructor will select one of the proposed topics (provided no conflict in doing so) and inform the students.
  Students are encouraged to share the video with potential employer or anyone who may benefit from your work.
  * The video is intended to reside in the public domain. The instructor may share the submitted videos with external parties (past/future students, other faculty members, potential employers, etc.), as well as your classmates, for educational/job placement purpose. Thus, you are encouraged to maintain your privacy in the video. You are not required to disclose any personal info other than your name and face.

- **Online Discussions:** Every student is required to closely monitor & contribute to online discussions on the Brightspace discussion boards. Online discussions add depth and context to your understanding of course topics. Therefore, participation in online discussions is an important learning activity in this course.
  Participation in online discussions will be randomly checked and graded several times throughout the semester. In order to earn full credit for this grading category, you need to **read all messages** on the discussion boards and **post at least one value-adding message** on the "Discussions and Q&A" board.

  A value-adding message would have the following characteristics:
  1. Theoretical or technical information relevant to a course topic.
  2. Help readers improve their understanding of an infosec issue/topic.
  3. Self-contained message: Readers do not need to refer to another online/offline resource to understand the message.
  4. Original: The message must be written by you in your own language. The source of the info (e.g., URL, journal article reference info) should be clearly cited. You can quote a line or two from a cited material, but you should not copy & paste a whole block of other's writing even with a citation.

Some ways to earn extra Online Discussions points:
1. Include business/practical implications (e.g., why does it matter to some organizations, societies, or consumers? Who can do what in order to benefit from the information in the message?).
2. Ask a well composed question message. When you ask a question, elaborate your question (i.e., clearly specify what you already understand and what is that you don't know) and provide all necessary info (e.g., the organizational or technical context of the issue in question such as business process, network design, error message/screenshot, system specification, etc.).
3. Provide a comprehensive answer to a posted question (from others or your own). The answer may not work for the particular question instance but may solve a similar instance. The answer should include some explanation of the suggested solution and boundary conditions (i.e., what was the underlying problem/issue of the questioned situation, how would the solution resolve the problem, what are the conditions for the solution to work)

Some ways to lose Online Discussions points:
1. Post a redundant question or answer – If your question or answer is substantively similar to a previously posted question/answer, you will be considered as not having monitored the discussion boards.
2. Show an inappropriate behavior – If your message includes any element that is unprofessional (e.g., use of slangs, disclose classified info), unethical (e.g., copying others' work without acknowledging it, accessing unauthorized systems to answer a question), or offend others (see Internet Netiquette Guidelines section), you will be considered as not having learned the integrity and soft skills expected from business-major students.
3. Post a one-liner like "hey, check out this webpage", "This is interesting!", "Thank you for the info", etc. Keep in mind that everyone in the class is supposed to read every message on the graded discussion boards. Don't add your tweets in their reading list.
4. Ask a question that lacks info needed to answer the question IF such info need could be easily anticipated and provided earlier. If you don't bother to help others answer your question, others won't bother to help you solve your problem. Also, any unnecessary message traffic will cause a wasteful distraction to each and every other student in the class.

- **Assignments:** There will be 4-6 assignments. An assignment can be a written document (e.g., design, research report) or a result of hands-on activities (e.g., lab) or both (e.g., lab report and a VM snapshot). Different assignments may carry different weights within the Assignments category.

- **Exams:** You will take two exams throughout the semester, all delivered via BrightSpace. These exams will be comprehensive take-home exams that involve some lab components and documentation/presentation of your theoretical understanding and technical skills developed in the previous classes, labs, assignment, and discussions. The two exams will carry the same weights within the category.

Instructor Response

The instructor will respond to student emails within one business day, provided the student use the right email address (SecureISA@live.com). Emails sent to elsewhere (e.g., okstate.edu), lacking required info (i.e., full name & section), or inappropriately written (use the same criteria as online discussions) may not be answered.

Students may expect grades for assignments to be posted to the BrightSpace Gradebook within two (written) or three (video & lab) weeks from the submission deadline.

Students with urgent issue should send a message via **email** or **Hangouts** for timely assistance.

Make-up Policy

Students are expected to take each exam within the given time window and submit each assignment by the specified deadline. If for any reason a student cannot take an exam during the specified exam window, (s)he must notify the instructor prior to the exam week and re-arrange the schedule.

Due to the transient nature of the lab environments, no make-up opportunity will be allowed for some lab assignments.

University Policy

Drop Policy

Information about university drop policy and dates is at this website:
http://registrar.okstate.edu/
To drop this course, contact the Registrar's office, (405) 744-6876, or drop through Banner Self Service, http://my.okstate.edu.

Academic Integrity

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, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, 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 (F!), 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, http://academicintegrity.okstate.edu/.

Accessibility

Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact the instructor as soon as possible, so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunity. For more information about OSU Student Disability Services, please go to: http://sds.okstate.edu.

Internet Netiquette Guidelines

A melding of the words "network" and "etiquette", **netiquette** refers to the manner in which communication is conveyed in an electronic environment.

Here are some guidelines for communication within this course:
- REFRAIN FROM USING ALL CAPS. It is considered SHOUTING when communicating online.
- Do not post or forward offensive or racially insensitive jokes or comments.
- Be careful with humor and sarcasm.
- Don't respond to personal attacks: Contact the instructor for action and referral.
- Always add in the subject line a concise statement describing the email or discussion post.
- Respect others' opinions. If you disagree with what another has said, post your thoughts in an objective, respectful manner. Do not make remarks that can be taken personally.
- Reflect upon the text you have entered before posting.
- Keep the discussion within the scope of the course material.
- Communication should be grammatically correct. Adhere to correct sentence structure, grammar, and spelling conventions. Proofread for errors before posting a message.
- Before you respond to a threaded message, read all the messages related to that message that have been previously posted.
- Send out an email to a group using the blind carbon copy field – BCC does not allow your recipients to view who was sent the email.