# MSIS 5713: Information Assurance Management
## Spring Semester 2018

ACTION: one week prior to course start date, go to the Spears School of Business Online Learning website to choose a testing center at:

spearsonline.okstate.edu<https://stwcas.okstate.edu/cas/login?service=https%3A%2F%2Fspears online.okstate.edu%2Ffullcalendar%2Fadmin>, and click on "Select Testing Center" at the top right of the page. Follow the instructions to identify your testing center. Up to one week before each exam start date, make your appointment directly with your testing center to take each exam while being monitored by a proctor for test security reasons. The exam and/or exam instructions will be sent to your testing center 3 days prior to the exam start date. To confirm your testing center received the exam/exam information, call at least one day prior to your appointment time. If the center does not have your exam, contact the Spears School Online Learning office immediately at spearsonline@okstate.edu<mailto:spearsonline@okstate.edu>, or call (405) 744-4048 to request the exam to be sent. Contact that same office if you have any questions regarding the testing center sign up process. You may also visit http://spears.okstate.edu/online/guide.

**This online course has the following technical requirements:**

· A broadband internet connection

· Windows 7 or Mac OS Mavericks or newer operating system are preferred

· Google Chrome or Mozilla Firefox web browser
  **Note:** lecture videos are **not** compatible with Internet Explorer or Edge.

· VLC Viewer video player

**Sections:**
MSIS 5713.29949

**Instructor:** Dr. Jim Burkman
**E-mail:** jim.burkman@okstate.edu
**Homepage:** online.okstate.edu
**Office:** GAB 311C (that's the "old" business building, mid-semester I'll move to BUS 306 and that will be in the new business building)
**Office hours:** By appointment
**Phone:** 744-5142
**Club:** http://isac.okstate.edu

**Textbooks:** *None*

**The OSU Syllabus Attachment includes important dates, information, and resources to HELP YOU SUCCEED and is available on the course BRIGHTSPACE site.**

**Discussion Forum:** There is a discussion forum on Brightspace where you can share information, ask questions, etc. I'll be hanging out there as well.

**The OSU Spring Syllabus Attachment includes important dates, information, and resources to HELP YOU SUCCEED and is available on the course Brightspace site.**

**Course Site:** (Brightspace by D2L): http://online.okstate.edu or http://my.okstate.edu (choose Online Classroom after logging in)

**Online Learning Support:** spearsonline@okstate.edu
Phone: 405-744-4048
Facebook: Follow Spears School Online Learning on
Facebook! http://www.facebook.com/SpearsOnline/

**Course Description:** Today's powerful computers allow for the use of scripting languages (as opposed to compiled programs) to perform a wide variety of essentials business programmatic tasks. In the Linux environment, which is most common for servers, the BASH shell provides a tremendous amount of helpful functionality. The same for Windows, where the PowerShell environment has recently become very powerful. For even greater flexibility we can use a computer language like Python – with its many open source libraries – to automate routine and repetitive tasks.

This course will give the student a foundational understanding of these scripting languages and the utility of scripting as a process. Students will be expected to demonstrate proficiency of these languages (including RegEx text parsing) in both exam and project formats.

Course content will be delivered primarily through lectures and lab projects. Additional readings may be assigned.

Be sure to check the Brightspace site often. This syllabus and the Brightspace site for this class will likely change in response to the progress of this class. The policies and schedule in this syllabus are subject to change at my discretion, upon notice in any form to the class. You are responsible for getting any downloads offered for upcoming classes from Brightspace. Handouts, assignments, slides, due dates, and other information will be posted on Brightspace.

**Learning Goals and Course Objectives:**

*Critical Making*

Upon completion of this course the student should be able to:

Identify appropriate use cases where scripting would increase business efficacy

Break complex problems into component parts for solution creation

Apply technical knowledge to solve unstructured problems

Be able to evaluate the merit of alternate explanations for patterns in data and behaviors.

*Business Knowledge and Competency*

Upon completion of this course the student should be able to:

Demonstrate a fundamental knowledge of the applications of scripting languages in the business environment.

Apply scripting to solve a business problem.

Resolve business needs into logical processes that can be instantiated in coded steps.

*Technological Competence*

Upon completion of this course the student should be able to:

Read, write and edit complex scripts in Bash, PowerShell and Python.

Utilize RegEx text searching in a variety of environments.

Use scripting to augment other MIS skill such as data analysis and information assurance.

**Attendance:**  Attendance is at your whim, given that this is an online course.  The coursework will be substantial, however, and assignment deadlines are immutable.  I suggest that you stay very involved and very on top of this course.

**Participation:**  Class participation is an integral part of the class.  Students with scripting experience are expected to help others when permissible.

**Class Conduct**:  In the course forums and all correspondence please always keep your comments civil.  No trolling, no passive-aggressive snarking.

**Graduate Grading:**

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|---|---|
| Homework | 45% |
| Lab Projects | 20% |
| Graduate Projects | 20% |
| Final Exam | 15% |

A course grade of 90% or better will result in a letter grade of A, 80-89% B, 70-79% C, 60-69% D, <60% F. **NOTE!** I reserve the right to uniformly move the class average up at the end of the semester. For example, if the course average is 70%, I will not move it to 68%, but I may move it to 72%. This is not a curving process, as all individual scores would move the same amount.

**Homework**:  These will in include in-class "follow along" assignments that you may end up completing outside of class and additional work required outside of class.  The format and due date for each homework will be given when assigned.  Every homework, regardless of the number of questions or deliverable points, will be weighted equally.   All homework assignments combined are worth 45% of your course grade.

**Lab Projects:**  These will be larger assignments intended to test your mastery and extension of concepts that we've covered in class and in homework assignments.  Lab projects are to be treated like exams.  No collaboration and all work must be entirely your own.  The format and due date for each project will be given when assigned.  Every project, regardless of the number of questions or deliverable points, will be weighted equally.  All projects combined are worth 20% of your course grade.

**Graduate Projects:**  Several times during the semester the active learning objective will be expanded for graduate students through an additional project.  This may be a small paper, scripting in another language, building a custom script of higher complexity, etc.  Graduate projects are to be treated like exams.  No collaboration and all work must be entirely your own. The format and due date for each project will be given when assigned.  Every graduate project,

regardless of the number of questions or deliverable points, will be weighted equally. All graduate projects combined are worth 20% of your course grade.

**Final Exam:** This will be a comprehensive, proctored exam delivered through Brightspace. You may schedule your exam May 10th or May 11th. You may bring and use one 5x7 note card of handwritten, printed or typed notes (front and back) during the exam.

**Extra Credit:** Extra credit is generally not provided in this class for graduate students.

**Software:** Since you are enrolled in an MSIS class you will have access to our MSDNAA license and our VMWare license. You should receive an email with information about this opportunity. Go to Login, click on the "I forgot my password", and provide your Okey email as your login name. Your password will be mailed to you. Note that this can take a few days to get set up at the start of the semester. If you'd like to learn how to virtualize Windows on your Mac using this free software let me know and I'll help!

**Instructor Response:** You should hear back from me within the hour for most emails. If for some reason you've not gotten a response with 24 hours please email me again. That's a rare oversight on my part. Remember, emailing me is the fastest way to get my attention! Grades for exams will appear on Brightspace right after you take the exam.

**Make-up Policy:** Students are expected to take each exam on the dates given. Please contact me as quickly as possible if there is going to be a conflict.

**Drop Policy:** Information about university drop policy and dates is at: http://registrar.okstate.edu/ Click on "class schedules," and "short courses" To drop this course, contact the Registrar's office, (405) 744-6876, or drop through Banner Service.

**Academic Conduct:** 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, academicintegrity.okstate.edu.

**Disabled Students:** According to the ADA, each student with a disability is responsible for notifying the University of his/her disability and requesting accommodations. If you think you have a qualified disability and need classroom accommodations, contact the office of Student

Disability Services (SU 315).  Please advise the instructor of your disability as soon as possible, to ensure timely implementation of appropriate accommodations.  Faculty have an obligation to respond when they receive official notice of a disability from SDS but are under no obligation to provide retroactive accommodations.  To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified.  For more information about OSU Student Disability Services, please go to: http://sds.okstate.edu or call 405-744-7116 v/t.

| Course Topics (Subject to Change) | | |
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| **Week 1** | Jan 15 | Course Intro and Setup |
| **Week 2** | Jan 22 | Linux Overview and Exploration |
| **Week 3** | Jan 29 | Linux Command and Text Files |
| **Week 4** | Feb 5 | Linux Scripting I and II |
| **Week 5** | Feb 12 | Lab |
| **Week 6** | Feb 19 | Regex I and II |
| **Week 7** | Feb 26 | Regex II and Lab |
| **Week 8** | Mar 5 | Python Intro and Basics |
| **Week 9** | Mar 12 | Python Scripting Commands and Programming |
| **Week 10** | Mar 19 | **Spring Break** |
| **Week 11** | Mar 26 | Python Script I and II |
| **Week 12** | Apr 2 | Pythong Script III and Excel |
| **Week 13** | Apr 9 | Lab |
| **Week 14** | Apr 16 | Intro to Powershell, Powershell I |
| **Week 15** | Apr 23 | Powershell II and III |
| **Week 16** | Apr 30 | Lab |