KELCE
COLLEGE OF BUSINESS
Pittsburg State University

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Instructor:	Dr. David Sikolia
Office:	Kelce 223H
Hours:	TTh 9:30 – 11:30, MW 9:00 – 12:00
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Textbook

 No textbook is required for this course. The instructor will provide supplementary materials, and all software needed to complete assignments will be available in the Kelce computer labs or as a free download online.

Course Description

 System administration is a broad concept that deals with a wide range of organizational activities. This introduction to system administration is designed to prepare you to enter the role of a system administrator in today's business environment equipped with a basic knowledge how to administer Windows and Linux systems, both on premise and in the cloud, networking, virtualization, scripting, and user management. Additionally, the study of system administration touches on network security concepts that have important implications for every organization.

 Prerequisites

Prerequisite: CIS 420 Management Information Systems or ACCTG 420 Accounting Information Systems, or permission of instructor.

Course Objectives / Learning Outcomes
 Upon completion of this course, you should be able to:
1. Install and configure Windows Server and its components.
2. Set up a Windows domain and understand the basics of domain administration
3. Understand different virtualization environments and how to use them.
4. Define the components of today's most common computer networking environments. 5. Understand how to set up servers and networks in both AWS and Microsoft Azure
6. Understand user management and the administration of Active Directory.
7. Recognize potential security threats and how to deal with them.
8. Understand basic scripting and programming techniques used by system administrators.

Teaching Methods

The course content will primarily be delivered through pre-recorded video lectures, video demonstrations, and online materials. It is the student's responsibility to participate in the course by watching the pre-recorded materials each week – and students will be quizzed on videos each week to ensure that they are following along.

Amazon AWS and Microsoft Azure will be used as part of the hands-on labs for this course. Students are encouraged to schedule time on Zoom with the instructor if they need assistance using these tools. Students will need to create student accounts for each to be able to participate in lab assignments. More information will be given in a class video.

The instructor may schedule occasional Zoom calls with the full class to review material and help with engagement as needed throughout the semester. These will most likely take place on Monday evenings if needed.

Canvas

Canvas will be heavily utilized in this course since it is online. All class lecture and demonstration videos will be available on Canvas. Additionally, supplemental materials for the course will be available on Canvas, and all homework assignments, quizzes, and exams will also be done through Canvas.

Participation Policy

Participation in class is mandatory, and especially important since the course is fully online. There is a strong correlation between consistent participation and a good grade in the class. Additionally, skipping lecture/demonstration videos may mean missing important details and demonstrations related to homework assignments, which can further negatively impact grade.

There will be quizzes built into class videos to ensure that students are watching them and absorbing the material every week. Taking these quizzes will be used to give students participation points each week, in leu of regular attendance points that would be given for an in-person class. More details will be provided in a class video.

Important: The participation video quizzes are due Sunday at midnight of each week. If you have not submitted the video quiz by Sunday at midnight for that week without getting an extension prior to the due date for a valid reason, you will not receive that week's points.

Classroom Conduct

Students are expected to be respectful of the instructor and others in all online discussions, whether they are discussion boards, or Zoom calls. Student should also be punctual when attending Zoom calls and must notify the instructor if they cannot make a class scheduled Zoom call.

Withdrawal

Students wishing to withdraw from the class are solely responsible for doing so. The instructor will not drop students from the course.

Academic Integrity

All Pitt State students are bound by the academic integrity policies of the university as described and outlined in the current Syllabus Supplement. Please familiarize yourself with these rules and guidelines. In addition, as a course offered through the Kelce College of Business, students in this class are obligated to adhere to the college's Student Code of Ethics as outlined below. Students pledge to:

- Arrive on time, remain until dismissed at all class sessions, and notify instructors in advance of anticipated absences, late arrivals, or early departures whenever possible.

- Turn off cell phones or other electronic devices while in class, unless permission to use them has been granted.

- Refrain from class disturbances.

- Refrain from use of profane or vulgar language in a threatening or disruptive manner.

- Treat fellow students, staff, faculty, administrators, and property with respect.

- Refrain from giving or receiving inappropriate assistance.

- Prepare assignment and exams honestly, refraining from such unacceptable conduct as plagiarism or unacknowledged appropriation of another's work in any academic work.

- Obey the policies, regulations, and laws of the United States of America, the State of Kansas, The Kansas Board of Regents, Pittsburg State University, and the Gladys A. Kelce College of Business.
  If a student observes someone committing dishonesty in connection with academic work, the student is encouraged to report that dishonesty to the appropriate individual (ex, faculty member, or administrator).

Students with Disabilities
Please inform the instructor if you have a learning or physical disability that interferes with course requirements. Assistance and/or appropriate accommodations may be available through the contacts listed on the current Syllabus Supplement.

Course Evaluation Methods
Participation: Participation points will be given each week based on quizzes or other mechanisms evaluating that student have been watching class videos and are worth about 10% of the student's grade.

Assignments and labs: Several homework assignments will be distributed throughout the semester via Canvas.

Paper: Each student will write a paper at the end of the semester over a system administration topic of their choice that was not covered in class. The purpose of these papers is to be exposed to topics we are not able to cover in one semester. A list of suggested topics will be provided, but students are also encouraged to do their paper on any approved system administration topic in which they are interested.

Quizzes: There will be several quizzes (in addition to the weekly participation quizzes) scheduled throughout the semester that will be taken through Canvas to reinforce course concepts.

Exams: There will be three exams given during the semester, worth 100 points each. These exams will be composed of a combination of multiple choice, short answer, and essay/diagramming questions.

Anticipated points breakdown:

Item	Total Points
Participation	50
Quizzes	100
Labs	200
Homework	100

Exams	450
Paper	100
Total	1000

Late Work Policy

Unless a student has asked for an extension for a legitimate reason prior to an assignment due date, late work will not be accepted in this course. All late work will automatically result in a 0 grade being given unless an extension is granted.

Course Outline

The following topic outline is tentative and subject to change based on the needs of the course participants and the instructor.

Topics
Introduction to course; System administration terms; Roles of the System Administrator;
Operating Systems Overview
Networking overview
Introduction to Windows domains; Windows Server Installation/Configuration/Domain Setup
User Management Concepts; Introduction to Active Directory; Advanced Windows Domain Management Concepts: Replication and Group Policy
Test 1
Command Prompt use for basic Windows Administration
Basic scripting in Windows; Introduction to PowerShell; Scheduled tasks;
Logging, Monitoring, and Performance on Windows Server; On Premise Virtualization;
Test 2
Security Topics

Introduction to Linux Administration; Linux Server setup;
Apache Setup and IIS Setup; Bash Scripting basics;
Presentations
Test 3

Note

The instructor reserves the right to amend and to reorganize this syllabus at any time.

Syllabus supplement