

ITNW 2356

Designing a Network Directory Infrastructure

Spring 2017

Instructor: Michael Slaughter
Email: mslaughter@southplainscollege.edu
Office Number: (806) 716-2242
Course Name: ITNW 2356.001
Course Days: Thursday (Hybrid)
Course Time: 01:00 – 04:50 PM

Course Description

In this course, the student will learn to implement, administer, and troubleshoot information systems that incorporate servers in a networked computing environment.

Hybrid Format

This is a hybrid format class. This means we will meet for class once a week, and the remaining part of the course will be online. You must check Blackboard regularly for updates, otherwise you may miss an important announcement. Our in class meeting will be a mix between in class labs and lectures.

Textbook and Hardware Requirements

We will be using TestOut LabSim 4.0.215 for this course. You will need to purchase an activation code from the SPC bookstore or online at the link mentioned below. Once activated, you will need to enroll in the course mentioned below. Also below is a link to a video with instructions on how to enroll in the LabSim course. This software will provide you with a virtual environment that we will use for labs, homework assignments and exams. It will also provide you with a wealth of information, reading materials, and videos to aid in your learning experience. This particular LabSim course will also prepare you for the TestOut Windows Server Pro: Install and Configure Certification and the first test (70-411) for the MCSA Server 2012 certification. MCSA 70-411 objectives can be found [here](#).

LabSim:

Promo Code: 14-232TA
Course Product: TestOut Windows Server Pro: Manage and Administer
ISBN: 978-1-935080-50-3
School Name: South Plains College
Instructor Name: Michael Slaughter
Course Name: SP2017-ITNW2356.001
Purchase Link: <http://www.testout.com/home/student-resources/student-purchasing>
Instructions Link: <http://www.testout.com/home/student-resources/how-to-tutorials>
(View the “Students Not Activated by Teachers” PDF)

Textbook (Recommended):

Title: Administering Windows Server 2012 R2 Training Guide by Orin Thomas
ISBN: 978-0-7356-8469-0

Assumed Knowledge

It is assumed that you possess basic computer skills relating to using the internet, applications and other basic computing tasks. It is also assumed that you have taken or possess the needed knowledge equal to ITNW1325 Fundamentals of Networking and ITSC1325 PC Hardware. If you have not taken those courses, or question your knowledge, please contact me ASAP about how to proceed. It is also assumed that if you run into content you do not understand; you will research that content on your own as well as ask the instructor for assistance.

Software Requirements

Because some of the assignments will be done and submitted outside of class, you will need access to the following programs outside of the classroom:

- Internet Connection and Web Browser (Chrome or IE)
- TestOut Account

Communication

Communication for this class will be conducted through SPC email. All students will be required to check their SPC student email accounts regularly for course updates and announcements. Please include your name, course name, and section number in all email communication. Other important announcements may be given during in class meetings, so attendance is key for complete communication.

Attendance Policy

You will be **dropped** from the course with an “X” or an “F” after **four** absences, or if I feel the objectives cannot be met due to excessive absence. If you are not sure how many absences you have accumulated, please be sure to notify me so that I can provide you with an absentee count.

If you are absent, you are still required to complete the assigned work by the indicated due date. You’ll want to be sure to ask a classmate what material you missed on the day you were absent so that you’ll be caught up when you return. I will not repeat the information you missed when you return. Frequent tardiness will result in an absence.

Reading/Study Assignments

Mandatory, assigned reading is a requirement for this course. Reading assignments includes all material in the LabSim course content that is assigned for a given week, as well as the chapters assigned in Microsoft Press textbook. Study assignments include all lectures in LabSim, demonstrations in LabSim, notes taken from your in-class lectures, and other content presented throughout the course. Although reading/study assignments are not taken for a grade, they are required to be successful in this course.

Assignments and Lab Projects

Procrastination will not serve you well in this course. Most assignments will be available through the LabSim software. Each chapter will have several small assignments and labs that will count toward your homework grade. For the TestOut LabSim section assigned, all labs and exams are pulled for homework grades.

There will also small homework assignments and projects that will be assigned periodically throughout the semester. These assignments and/or projects will be announced in class and available in Blackboard. **NO LATE WORK IS ACCEPTED!** In-class labs will also be completed throughout this course. It is expected that you take care of all equipment and check that equipment in/out with the instructor.

Exams

There will be two exams given in this class, a midterm and a final exam. **Make-up exams will not be given.** If the midterm exam is missed, then the final exam grade will count as both the final and midterm grade. Also, if a student does better on the final than the midterm, I will substitute the final grade as the midterm grade.

Grades

Grades will be calculated as follows:

	Possible Points
Assignments/Lab Projects	30%
Midterm	30%
Final Exam	40%

All assignments are mandatory. **I reserve the right to drop or fail you if homework assignments are frequently missed or incomplete.**

Grades will be available through LabSim (Homework/Exam Grades) and Blackboard. Blackboard grades will show a running average of how you are performing throughout the semester. Blackboard grades will be updated regularly throughout the semester.

Instructional and Outside Course Time Estimation:

In-Class Instructional/Lab/Quiz Time: 3.3hrs/wk x 16wks = 52.8 hrs

TestOut LabSim Time: 3hrs/wk x 16wks = 48 hrs

Midterm Exam Prep: 4 hrs/wk x 2 wks = 8hrs

Final Exam Prep: 4hrs/wk x 3wks = 12 hrs

Server Pro M&A Cert Exam: 2hrs x 1 = 2 hrs

Exam Time: 2hrs/exam x 2 = 4 hrs

Total Course Time = 126.8 hrs

Total Time/Week = 7.925 hrs

In-Class Computer, Cell Phone and iPod Use

Students will **not** be allowed to surf the web, check their personal e-mail or social media accounts, or do work for any other course while class is in session.

Students will not be allowed to use their cell phones during class. If the student is found using social media, surfing the web, or using their cell phone, they will be asked to leave the class and they will be counted absent for that day. If the incident reoccurs, they will be reported to the dean of students. In cases of emergency, the student is asked to leave the classroom to use

their cell phone. **If a student has a cell phone or other device out during an exam, they will be asked to leave and will get a zero for that exam.**

Food and Drinks

No food or drinks are allowed in the Technology Center. Do not bring those to class. If you do, you will be asked to leave class and counted as absent. If this happens more than once you may be dropped from the class.

Drop Policy

You may be dropped from this course for the following reasons:

- Attendance
 - You have four or more absences
- Participation, completion of homework, exams, and team project
 - You have missed 2-3 classes and several homework assignments
 - You have missed several homework assignments
 - You have missed two or more exams without rescheduling with the instructor
- Academic Integrity
 - Cheating, plagiarism, or sharing your work with others

NOTICE

Texas SB11 (Campus Concealed Carry) does not go into effect for community colleges until August 1st, 2017.

Academic Integrity

It is the aim of the faculty at South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences and possible suspension. Please refer to the SPC General Catalog regarding consequences for cheating and plagiarism. **I reserve the right to administratively drop with an "F" any student whom I suspect of academic dishonesty.**

****Do not, under any circumstances, turn in another student's file as your own. Do not, under any circumstances, give your file to anyone else to turn in as their own. Both situations are representative of academic dishonesty and will be treated as such.****

Disclaimer

Because we will use Blackboard to conduct a portion of this class, please note that the materials you may be accessing in chat rooms, bulletin boards or unofficial web pages are not officially sponsored by South Plains College. The United States Constitution rights of free speech apply to all members of our community regardless of the medium used. We disclaim all liability for data, information or opinions expressed in these forums.

Diversity Statement

In this course, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world, and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should be and can be.

Special Services

4.1.1.2 Disabilities Statement

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office through the Guidance and Counseling Centers at Reese Center (Building 8) 716-4606, or Levelland (Student Services Building) 716-2577.

Counseling

If at any point in the semester you find yourself having trouble with stress or feel depressed please stop in and see a counselor. Counseling services are available at all campuses. The number for the counseling office is 806-716-2366. Below is a link to SPC's personal counseling services.

<http://www.southplainscollege.edu/information-for/current-spc-students/counseling-current/personal-counseling.php>

Course Schedule

Week	Date	Chapter
1	Jan 17 - 22	TestOut 1.0-1.4
2	Jan 23 - 29	TestOut 1.5-1.8 Training Guide Chapter 4
3	Jan 30 – Feb 5	TestOut 2.0-2.3 Training Guide Chapter 2
4	Feb 6 - 12	TestOut 2.4-2.6 Training Guide Chapter 5
5	Feb 13 - 19	TestOut 2.7-2.10 Training Guide Chapter 6
6	Feb 20 – 26	TestOut 3.0-3.5 Training Guide Chapter 9 Midterm Review
7	Feb 27 – Mar 5	TestOut 4.0-4.3 Training Guide Chapter 3 Midterm Review
8	Mar 6 - 12	TestOut 4.4-4.6 Training Guide Chapter 3 MIDTERM EXAM
March 13-19 Spring Break		
9	Mar 20 - 27	TestOut 5.1-5.4 Training Guide Chapter 7
10	Mar 27 – Apr 2	TestOut 5.5-5.7 Training Guide Chapter 8
11	Apr 3 - 9	TestOut 6.0-6.3 Training Guide Chapter 1
12	Apr 10 - 16	TestOut 6.4-6.6 Training Guide Chapter 10
13	Apr 17 - 23	TestOut Windows Server Pro Practice Exam 100-300 Final Exam Review
14	Apr 24 - 30	TestOut Windows Server Pro Practice Exam 400-600 Final Exam Review
15	May 1 - 7	TestOut Windows Server Pro Practice Exam Certification Practice Exam (TESTOUT SERVER PRO CERT. EXAM OPEN IF STANDARDS ARE MET) Final Exam Review
16	May 8 - 11	FINALS

Dates are subject to change. All homework is due each Sunday at 11:59 pm.

Approximate Time for the Course

The total time for the LabSim Windows Server Pro: Manage and Administer course is approximately 44 hours and 30 minutes. The time is calculated by adding the approximate time for each section which is calculated using the following elements:

- Video/demo times
- Approximate time to read the text lesson (the length of each text lesson is taken into consideration)
- Simulations (5 minutes assigned per simulation, of course many students may take longer depending upon their knowledge level and experience)
- Questions (1 minute per question)

The total amount of LabSim content we will be covering comes to about 45 hours, which breaks down to about 3 hours of homework per week, plus time to read the content from the accompanying Microsoft Press book. The reason for the intensity in this course, is because this is what the industry expects you to know coming out of school. Dedicate the time to LEARNING the content and you will appreciate it when you graduate. –M. Slaughter

The breakdown for this course is as follows:

Module	Sections	Time	Minute	HR:MM
1.0 Active Directory				
	1.1 Active Directory Overview	20		
	1.2 Speeding Up Authentication	30		
	1.3 Single Master Operations Roles (FSMO)	55		
	1.4 Read Only Domain Controllers (RODCs)	30		
	1.5 Virtual Domain Controllers	20		
	1.6 Service Accounts	45		
	1.7 Maintaining Active Directory	50		

1.8 Restoring Active Directory	45	295	4:55
--------------------------------	----	-----	------

2.0 Group Policy

2.1 Group Policy Foundation	70
-----------------------------	----

2.2 Administrative Templates	35
------------------------------	----

2.3 Folder Redirection	10
------------------------	----

2.4 Software Deployment	50
-------------------------	----

2.5 Security Settings	30
-----------------------	----

2.6 Password and Account Policies	60
-----------------------------------	----

2.7 Advanced Auditing	45
-----------------------	----

2.8 Preferences	35
-----------------	----

2.9 Group Policy Management	40
-----------------------------	----

2.10 Management Delegation	25	400	6:40
----------------------------	----	-----	------

3.0 File Services

3.1 File Server Resource Manager	50
----------------------------------	----

3.2 Distributed File System (DFS)	25
-----------------------------------	----

3.3 Distributed File System Replication	55
---	----

3.4 File Encryption	50
---------------------	----

3.5 Disk Encryption	50	220	3:50
---------------------	----	-----	------

4.0 DNS

4.1 DNS Name Resolution	25
-------------------------	----

4.2 DNS Forwarding and Delegation	35
-----------------------------------	----

4.3 DNS Zones	55
---------------	----

4.4 DNS Zone Management	45
-------------------------	----

4.5 DNS Records	50		
4.6 DNS Options	35	245	4:05

5.0 Remote Access Management

5.1 Routing	65		
5.2 Network Address Translation (NAT)	30		
5.3 Virtual Private Networks (VPN)	65		
5.4 Network Policy Server	40		
5.5 RADIUS	60		
5.6 Network Access Protection	65		
5.7 DirectAccess	65	390	6:30

6.0 Server Management

6.1 Windows Software Update Services (WSUS)	65		
6.2 Windows Deployment Services (WDS)	45		
6.3 WDS Image Management	50		
6.4 Performance Monitor	40		
6.5 Event Viewer	35		
6.6 Network Monitor	15	250	4:10

Windows Server Pro: Manage & Administer Certification Practice Exam

100. Active Directory Management (7 questions)	35		
200. Group Policy Configuration (18 questions)	90		
300. File Services Management (6 questions)	30		
400. DNS Configuration (14 questions)	70		
500. Routing and Remote Access Configuration (11 questions)	55		

600. Deployment Management (7 questions)	35		
Certification Practice Exam (15 questions)	75	390	6:30
Microsoft 70-411 Practice Exams			
100. Deploy, Manage, and Maintain Servers (61 questions)	61		
200. Configure File and Print Services (69 questions)	69		
300. Configure Network Service and Access, (110 questions)	110		
400. Configure a Network Policy Server Infrastructure (31 questions)	31		
500. Configure and Manage Active Directory (76 questions)	76		
600. Configure and Manage Group Policy (63 questions)	63		
Certification Practice Exam (60 questions)	60	470	7:50
	Total Time	2660	44:30