Lake-Sumter State College Course Syllabus

Course Information:

Course Prefix/Number: CTS 2334

Course Title: Server Administration

CRN: 20501

Credit Hours: 3

Semester: Spring 2021

Class Days, Location, Time: Fully-online in Canvas and MindTap

Course Description: This course provides students with the knowledge and skills necessary to install, configure and troubleshoot client and server versions of the Microsoft Windows Operating System. It includes lectures, demonstrations and labs regarding system installation, file systems, administration (users, groups, and policies), network protocols and services, print services, security and reliability.

Instructor Information:

Name: Dr. Christopher Sargent

E-Mail: sargentc@lssc.edu

Office Location: Leesburg Campus, Lake Hall Room 105

Phone: 352-323-3635

Office Hours: Tuesdays and Thursdays 9am-2pm**

Office hours are virtual only. No face-to-face office hours will be possible in Spring 2021 due to the ongoing pandemic.

Your instructor will actively monitor Canvas Inbox during the times posted above and will respond quickly. If a student wishes to meet via Zoom or phone, they must make the request via Canvas Inbox at least 24 hours in advance. Zoom / phone requests will be scheduled Monday – Friday between 9:00 AM and 7:00 PM only, as my schedule permits. No weekend, holiday, or immediately on-demand Zoom / phone meetings will be scheduled.

Vital Communication Information:

For course communications, please note that all students are required to use CANVAS INBOX. Messages become part of the course archive for auditing purposes and conform to FERPA privacy rules.

Sending a private message using the INBOX tool in Canvas is always the most secure method of contacting your Instructor. **Please do not use Lake Hawk email to discuss anything course-specific with your instructor.

Prerequisites/Co-requisites:

Prerequisites: Cor higher in CET1179C.

Co-requisites: None

Textbook & Other Course Materials:

Title: MindTap Networking for Tomsho's MCSA Guide to Installation, Storage, and Compute with

Microsoft Windows Server 2016, Exam 70-740, 1st Edition

Author: Greg Tomsho Publisher: Cengage

ISBN: 978-1-337-40068-8 (REQUIRED)

Technology Requirements:

Canvas is a required component of this course. Students unfamiliar with Canvas are expected to visit the HELP/SUPPORT page located in the START HERE module in the course. This area includes the Canvas Student Quick Guide as well as access to many how-to video tutorials.

Cengage MindTap requires broadband internet access and supported web browsers and plugins.

Supported Browsers:

Windows®

Chrome[™] (preferred)

Firefox®

macOS™

Chrome™ (preferred)

Safari® 12 and 13

Other browsers and versions than those listed might also work but are not supported. If you have problems when using an unsupported browser version, try using a supported browser version before contacting Customer Support.

Workstation Recommendations

Download bandwidth: 5+ Mbps

RAM: 2+ GB

CPU: 1.8+ GHz / multi-core

Display: 1366 × 768, color

Graphics: DirectX, 64+ MB

Sound (for some content)

Please see the LSSC Lakehawk Helpdesk Page for information on how to <u>obtain Microsoft Office 365</u> as an LSSC Student.

Student Learning Outcomes:

The following outcomes will be assessed in this course. An "outcome" is defined as something students take with them beyond this course. After successful completion of this course, the student will:

- 1. Identify the features of the various flavors of Windows Server 2016.
- 2. Manage and troubleshoot hardware devices.
- 3. Create and manage user and computer accounts in Active Directory.
- 4. Plan and manage groups.
- 5. Configure permissions for file and folder access.
- 6. Manage disk and data storage.
- 7. Utilize Advanced File System Management.
- 8. Implement and manage printers.
- 9. Plan, configure, and troubleshoot Group Policy.
- 10. Perform remote server administration.
- 11. Monitor server performance.
- 12. Manage and implement backups and disaster recovery.
- 13. Configure Windows Server security.
- 14. Create basic scripts for server activity automation.

Course Objectives:

Objectives are defined as what the course will do and/or what the students will do as part of the course.

The course will provide the student with actual hands-on practice in applying the following administrative actions in a Windows server environment:

- Windows Server 2016 Installation and Configuration.
- Hardware device management.
- Active Directory administration.
- Advanced File System management.
- Printer management.
- Group Policy.
- Remote server administration.
- Server performance monitoring.
- Backups and disaster recovery.
- Windows Server security.
- Scripting for activity automation.

Institutional Policies & Procedures:

Academic Integrity:

The successful functioning of the academic community demands honesty, which is the basis of respect for both ideas and persons. In the academic community, there is an ongoing assumption of academic integrity at all levels. There is the expectation that work will be independently thoughtful and responsible as to its sources of information and inspiration. Honesty is an appropriate consideration in other ways as well, including but not limited to the responsible use of library resources, responsible conduct in examinations, and the responsible use of the Internet. See the college catalog7 for complete statement.

Important Information for Students with Disabilities:

Any student with a documented disability who requires assistance or academic accommodations should contact Student Accessibility Services immediately to discuss eligibility. Student Accessibility Services (SAS) is located on the Leesburg Campus, but arrangements can be made to meet with a student on any campus. An appointment can be made by calling 352-365-3589 and specific information about SAS and potential services can be found at Student Accessibility Services.

Privacy Policy (FERPA):

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part99) is a Federal law that protects the privacy of a student's education records. In order for your information to be released, a form must be signed and, in your records, located in the Admissions/Registrar's Office.

Zero-Tolerance for Violence Statement:

Lake-Sumter State College has a policy of zero tolerance for violence as stated in College Board Rule 2.17. Appropriate disciplinary action will be taken in accordance with Board Rule 2.17.

LSSC Safety Statement:

Lake-Sumter State College values the safety of all campus community members. **If you have an emergency, call 911**. Otherwise, to report a concern, suspicious activity, or to request a courtesy escort, call Campus Safety:

(352) 516-3795 Leesburg (352) 536-2143 South Lake (352) 303-7296 Sumter

LSSC also has a free safety app, **Lake-Sumter Safe** that is available for download. You will receive important emergency alerts and safety messages regarding campus safety via LSSC Alert. You are opted into this system when you become an LSSC student. For more information regarding safety and to view available resources, visit the <u>Campus Safety</u> web page.

Attendance/Withdrawal Policies:

Initial Attendance:

Initial attendance will be entered at the end of the second week of the semester/mini-mester. A student who has not met initial attendance requirements will be marked as "not-attending" and administratively withdrawn from the class. The withdrawn student is still financially responsible for the class. See the college catalog for more details.

Institutional Information:

Once the Add/Drop period passes, students deciding to discontinue class attendance and/or online participation have the responsibility for formal withdrawal by the withdrawal deadline.

Withdrawal Deadline:

Monday, March 29, 2021 by 4:30 pm

Instructor Policies:

- Labs and simulations must be completed by the established due dates. Students may complete each lab and simulation as many times as they wish before the due date. The highest grade earned will prevail.
- Quizzes and Exams must be completed by the established dues dates. Students may complete each quiz or exam only once.
- If you experience a technical issue with Cengage MindTap, you must contact MindTap support for assistance. This is a third-party product, and your instructor does not have the required access to the system to resolve technical errors. After contacting MindTap support, students must contact the instructor with a description of the issue and their support ticket number.
- If students wait until the last minute to attempt their work and experience a technical issue that they are unable to resolve before the assignment due date, no extensions will be given. Always start work early in the week to work out technical issues.

Late Work/Extensions:

Labs, Simulations, and Unit Quizzes: All labs, simulations, and Unit Quizzes must be completed and properly submitted by the published due dates and times posted on the Course Calendar. All late or incomplete homework will receive a zero (0).

- Work schedules and "I forgot" are not valid excuses for late work.
- Do not wait until the last minute to complete assignments. Starting early will allow students to get timely assistance from their instructor and/or technical support and still meet deadlines.
- It is the student's responsibility to have an alternate plan if their main computer system fails (i.e. complete work on-site at a campus library or learning center, have a secondary computer available, etc.).
- Computer hardware, software and/or Internet problems are not acceptable excuses for incomplete assignments.
- Completing homework assignments in a timely manner is an important part of the learning process. Students are expected to complete and submit all assignments by the due date and time listed on the course calendar.
- Instructors are not required to accept nor grade any assignment submitted late. Extensions are not possible.

Mid-term and Final Exams: There is no make up for exams except under documented circumstances such as hospital stay, doctor's excuse, police report, or military assignment.

- Students are expected to contact their instructor prior to any exam due date if they
 cannot meet the deadline. Each situation will be analyzed on a case-by-case basis by
 your instructor.
- Instructors are not required to accept nor grade any exam submitted late or incomplete.
- Failure to complete timed exams before the timer runs out will result in a reduced or failing grade for that assessment and no extension or late submission will be possible.

Classroom Etiquette:

Taking an online course or using Canvas for the course and corresponding via the World Wide Web presents communicators with the task of overcoming the lack of non-verbal in communication. When taking a course online, or using Canvas for the course, it is important to remember several points of etiquette that will smooth communication between the students and their instructors.

- 1. Avoid language that may come across as strong or offensive. Language can be easily misinterpreted in written communication. If a point must be stressed, review the statement to make sure that an outsider reading it would not be offended, then post the statement. Humor and sarcasm may easily be misinterpreted as well, so try to be as matter-of-fact and professional as possible.
- 2. **Keep writing to a point and stay on topic**. Online courses require a lot of reading. When writing, keep sentences poignant and brief so that readers do not get lost in wordy paragraphs and miss the point of the statement. Also, do not introduce new topics; it may just confuse the readers.
- 3. **Read first, write later.** It is important to read all posts or comments of students and instructors within the course discussion before personally commenting to prevent repeating commentary or asking questions that have already been answered.
- 4. **Review, review, then send.** There's no taking back a comment that has already been sent, so it is important to double-check all writing to make sure that it clearly conveys the exact intended message.
- 5. **An online classroom is still a classroom.** Though the courses may be online, appropriate classroom behavior is still mandatory. Respect for fellow classmates and the instructors is as important as ever.
- 6. **The language of the Internet.** Though still a fairly young type of communication, certain aspects of this form of communication are becoming conventional. For example, do not write using all capital letters, because it will appear as shouting. Also, the use of emoticons can be helpful when used to convey nonverbal feelings (example::-) or:-(), but avoid overusing them.
- 7. **Consider the privacy of others.** Ask permission prior to giving out a classmate's email address or other information.
- 8. **If possible, keep attachments small.** If it is necessary to send pictures, change the size to an acceptable 100k.
- 9. **No inappropriate material.** Do not forward virus warnings, chain letters, jokes, etc. to classmates or instructors. The sharing of pornographic material is forbidden.

Grading Information:

Grading Scale: 90-100% A, 80-89% B, 70-79% C, 60-69% D, 59% and below F

Methods of Evaluation:

Each item will be graded electronically using a rubric provided when the assignment is given. Your work will be judged against accepted academic standards for writing and documentation.

Assignment Overview & Grade Breakdown:

Category	Description	% of Total
Assignments	Unit Quizzes (MindTap) Introduce Yourself Discussion (Canvas) Orientation Quiz (Canvas)	30%
Labs	MindTap Labs and Simulations (MindTap)	50%
Exams	Midtermand Final Exams (MindTap)	20%
	Total Points	100%

Course Calendar: Weekly assignments are due Sunday nights by 11:59 PM, unless otherwise noted.

Week	Dates	Objectives & Reading Assignments	Items Due	Notes
1 – Course Introduction and Housekeeping	Jan 11-17	Read and understand the syllabus Register MindTap	 "Introduce Yourself" discussion in Canvas Orientation Quiz	MindTap offers a two-week free trial, but you must purchase the product to continue after that.
2 – Introducing Windows Server 2016	Jan 18-24	Read Unit 1	 Unit 1 Quiz (MindTap) Lab Simulation 1-1 (MindTap) Live Virtual Machine Lab 1-1 (MindTap) 	If you experience issues with the MindTap labs, you must immediately contact MindTap support and share with me your ticket number and issue description.
3 – Installing Windows Server 2016	Jan 25-31	Read Unit 2	 Unit 2 Quiz (MindTap) Lab Simulation 2-1 (MindTap) Live Virtual Machine Lab 2-1 (MindTap) Live Virtual Machine Lab Installing Server Core (MindTap) Live Virtual Machine Lab Installing Windows Server 2016 (MindTap) 	
4 – Configuring and Managing Windows Server 2016	Feb 1-7	Read Unit 3	 Unit 3 Quiz (MindTap) Lab Simulation 3-1 (MindTap) Live Virtual Machine Lab 3-1 (MindTap) Live Virtual Machine Lab Maintaining OS Images Using DISM (MindTap) Live Virtual Machine Lab Manage OS Images with WDS (MindTap) 	

Week	Dates	Objectives & Reading Assignments	Items Due	Notes
5 – Configuring Storage and File Systems	Feb 8-14	Read Unit 4	 Unit 4 Quiz (MindTap) Lab Simulation 4-1 (MindTap) Lab Simulation 4-2 (MindTap) Live Virtual Machine Lab 4-1 (MindTap) Live Virtual Machine Lab Configuring SMB and NFS File Shares (MindTap) 	
6 – Configuring Advanced Storage Solutions	Feb 15-21	Read Unit 5	 Unit 5 Quiz (MindTap) Lab Simulation 5-1 (MindTap) Live Virtual Machine Lab 5-1 (MindTap) Live Virtual Machine Lab Managing Local Storage and Virtual Hard Discs (MindTap) Live Virtual Machine Lab Implementing Storage Pools (MindTap) Live Virtual Machine Lab Managing iSCSI Storage (MindTap) 	
7 – Implementing Virtualization with Hyper-V: Part 1	Feb 22-28	Read Unit 6	 Unit 6 Quiz (MindTap) Lab Simulation 6-1 (MindTap) Live Virtual Machine Lab 6-1 (MindTap) 	
8 – Mid-Term Exam	Mar 1-7	Mid-term Exam covers Unit 1-6	Mid-term Exam (MindTap)	
9 – Implementing Virtualization with Hyper-V: Part 2	Mar 8-14	Read Unit 7	 Unit 7 Quiz (MindTap) Lab Simulation 7-1 (MindTap) Live Virtual Machine Lab 7-1 (MindTap) Live Virtual Machine Lab Enabling Nested Virtualization (MindTap) 	
Spring Break	March 15-21	Spring Break	No work is due	

Week	Dates	Objectives & Reading Assignments	Items Due	Notes
10 – Implementing High Availability: Server Clusters	Mar 22-28	Read Unit 8	 Unit 8 Quiz (MindTap) Lab Simulation 8-1 (MindTap) Live Virtual Machine Lab 8-1 (MindTap) Live Virtual Machine Lab Install and Configure Network Load Balancing (MindTap) 	
11 – Implementing High Availability: Advanced Failover and Virtual Machines	Mar 29-Apr 4	Read Unit 9	 Unit 9 Quiz (MindTap) Lab Simulation 9-1 (MindTap) Live Virtual Machine Lab 9-1 (MindTap) Live Virtual Machine Lab Implementing Hyper-V Replica (MindTap) 	
12 – Maintaining Server Installations	Apr 5-11	Read Unit 10	 Unit 10 Quiz (MindTap) Lab Simulation 10-1 (MindTap) Live Virtual Machine Lab 10-1 (MindTap) Live Virtual Machine Lab Implementing Windows Server Update Services (MindTap) 	
13 – Server Monitoring and Backup	Apr 12-18	Read Unit 11	 Unit 11 Quiz (MindTap) Lab Simulation 11-1 (MindTap) Lab Simulation 11-2 (MindTap) Live Virtual Machine Lab 11-1 (MindTap) Live Virtual Machine Lab Implementing Centralized Event Logs (MindTap) Live Virtual Machine Lab Managing Server Performance (MindTap) 	

Week	Dates	Objectives & Reading Assignments	Items Due	Notes
14 - Nano Server and Windows Containers	Apr 19-25	Read Unit 12	 Unit 12 Quiz (MindTap) Lab Simulation 12-1 (MindTap) Live Virtual Machine Lab 12-1 (MindTap) Live Virtual Machine Lab Configuring and Managing Nano Server (MindTap) 	
Final Week	Apr 26-30	Final Exam covers all Units	Final Exam (MindTap)	Final Exam must be completed by 11:59 PM on Friday, April 30

Basic Needs Statement:

Any student who faces challenges securing basic needs such as food or housing and believes this may affect their performance in the course is encouraged to contact a campus dean at deanofstudents@lssc.edu. The deans will then be able to share any resources at their disposal.

Syllabus Disclaimer:

Information contained in this syllabus is, to the best knowledge of this instructor, considered correct and complete when distributed to the student. The instructor reserves the right, acting within policies and procedures of Lake-Sumter State College, to make necessary changes in course content or instructional techniques with notification to the students.