COMPUTER VIRTUALIZATION (ITNW 1313 6A1)



CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

None

COURSE DESCRIPTION

Implement and support virtualization in a networked computing environment. This course explores installation, configuration, and management of computer virtualization workstation and servers

COURSE OBJECTIVES

Upon completion of this course, the student will be able to

- Install and configure virtual machine managers
- Create and network virtual machines and set priorities for accessing resources
- Move and clone virtual machines
- Ensure high availability for applications within virtual machines.

INSTRUCTOR CONTACT INFORMATION

Instructor: Tim Storbeck

Email: tjstorbeck@lit.edu

Office Phone: 409-247-5236

Office Location: TA 4 Room 109D

Office Hours: As posted outside my office door and on Starfish. By appointment

through email

REQUIRED TEXTBOOK AND MATERIALS

Hands-on Virtual Computing, 2nd Edition; 2018; Simpson and Novak ISBN is 9781337101936 for print book

ISBN is 9781337669740 foe E-book

www.cengage.com

Approved: Initials/date

ATTENDANCE POLICY

Mandatory and makes up 10% of you grade

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the <u>Academic Calendar</u>. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

Important Drop Dates

Last Day to Drop with Refund	02/10/2025	
Last Day to Pay Tuition to Avoid Drop	02/20/2025	
Last Day to Drop without Academic Penalty	02/26/2025	
Last Day to Drop with Academic Penalty	04/14/2025	

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR (Subject to change)

DATE	TOPIC	READINGS	ASSIGNMENTS (Due on this Date)
Week 1 1/21-1/26	Course Introduction	Syllabus	Blackboard 2/3/2025
Week 2 1/26-2/2	Textbook and MindTap access	Blackboard	Cengage.com 2/3/2025

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Week 3 2/2-2/9	Introduction to Virtual Computing Environment	Module 1	None 2/10/2025
Week 4 2/9-2/16	Working w/ Oracle Virtual Box5	Module 2	Module 1 quiz Labs Module 2 2/17/2025
Week 5 2/1-2/23	Working w/ VM Ware Workstation 12	Module 3	Module 2 quiz Lab's module 3 2/24/2025
Week 6 2/23-3/2	Working w/ Data center Virtualization	Module 4	Module 3 quiz Module 4 lab 3/3/2025
Week 7 3/2-3/9	Working w/ Microsoft Hyper-V	Module 5	Module 4 quiz Module 5 lab 3/17/2025
Spring Break 3/9-3/16	Spring Break	Spring Break	Spring Break
Week 8 3/16-3/23	Working w/ Microsoft Hyper-V Virtual Manager	Module 6	Module 5 quiz Module 6 lab 3/24/2025
Week 9 3/23-3/30	Working w/ VMware V Sphere	Module 7	Module 6 quiz Module 7 lab 3/31/2025
Week 10 3/30-4/6	Working w/ VMware VCenter	Module 8	Module 7 quiz Module 8 lab 4/7/2025
Week 11 4/6-4/13	Working w/ VMware VCenter	Module 8	Module 8 quiz Module 8 lab 4/14/2025
Week 12 4/13-4/20	Implementing Virtual Desktop	Module 9	Module 9 lab 4/21/2025

Week 13 4/20-4/27	Using Virtual Computing in Cloud Computing	Module 10	Module 9 quiz Module 10 lab 4/28/2025
Week 14 4/27-5/4	Make up work	All modules	Module 10 quiz 5/5/2025
Week 15 5/4-5/11	Work on project Review	Review all modules	5/12/2025
Week 16 5/11-5/13	Final Exam	Final Exam	Final Exam 5/12/2025

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Packet Tracer/Labs 30%
Study Guides 10%
Exams 30%
Final Exam 30%

GRADING SCALE

90 - 100 A

80 - 89 B

70 – 79 C

60 - 69 D

0 - 59 F

LIT does not use +/- grading scales

A grade of 'C' or better must be earned in this course for credit toward degree requirement.

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Specialpopulations@lit.edu. You may also visit the online resource at Specialpopulations@lit.edu.

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the LIT Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at www.lit.edu. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

Certification Requirement

Cyber Security majors are required to earn certification in one of the following areas prior to graduation. Students are responsible for scheduling and paying for the certification through the LIT Testing Center.

- A+ Certification
- Network+ Certification
- Security+ Certification
- Linux+ Certification
- Cisco Certified Network Associate (CCNA)

Course Policies

- Email is the preferred method of communication (tjstorbeck@lit.edu). I cannot respond to Blackboard Messages, I can see them but I have no way to respond. I will respond within 48 hours except for weekends and holidays.
- 2. No food, drinks, use of tobacco products, or vaping products in class.
- 3. Electronic devices not being used for the class, such as phones and headphones, must be turned off while in class. Any device usage during class may result in adeduction of points on an assignment or test.
- 4. Do not bring children to class.
- 5. Certification: If a student passes the certification test that is associated with this class, you will receive an "A" on the final exam and credit for 25% of your labs.
- 6. A grade of 'C' or better must be earned in this course for credit toward degree requirement.
- 7. All assignment due dates are indicated in the Blackboard course for this class and the course calendar above. Any work submitted after the assigned due date will receive a 10-point deduction.
- 8. Tests are assigned a due date and must be completed by that date to receive full credit.
- 9. All assignments must be submitted via Blackboard unless specified by your instructor.
- 10. Grades for assignments may be accessed in the Gradebook in Blackboard. Each assignment shows your grade and any grading comments made on your assignment.

EAGLE LEARNING ESSENTIALS

Eagle Learning Essentials (ELE) https://lit.edu/student-success/eagle-learning-essentials is an affordable textbook rental program through the Barnes and Noble Bookstore. Through this program, students can receive required textbooks, lab manuals, access codes and electronic books conveniently before the first day of class.

The ELE bundle will provide the needed learning materials at \$14 per credit hour (added to your student account), saving students up to 35-50% on the cost of course materials. The cost can be paid by financial aid or by the student. If a student enrolls in a payment plan, this charge will be included in the payment plan calculations. Supplies are not included in this program and will need to be purchased separately.

LIT students are automatically enrolled in the program at the time of registration and will begin receiving emails about selecting their preferred delivery method.