Computer Virtualization
ITNW 1313.1A1 – Spring 2023

LAMAR INSTITUTE OF TECHNOLOGY

INSTRUCTOR CONTACT INFORMATION

Instructor: Tim Storbeck
Email: tjstorbeck@lit.edu
Office Phone: 409-247-5236
Office Location: T4 Rm 109D

Office Hours:		
	Monday/Wednesday	7:00-8:00 am, 2:30-4:30 pm
	Tuesday/Thursday	7:00-8:00 am, 10:30 – 11:00 am, 1:30 – 4:30 pm
	Friday	7:00-8:00 am

CREDIT

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

MODE OF INSTRUCTION

Hybrid

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

REQUIRED TEXTBOOK AND MATERIALS

- ***Hands-on Virtual Computing, 2nd Edition;*** 2018; Simpson and Novak
  - ISBN is 9781337101936 for print book
  - ISBN is 9781337669740 for E-book
- Computer with Internet access

ATTENDANCE POLICY

Attendance is mandatory. Students are expected to attend class regularly. Attendance counts for 10% of your grade.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

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

Week	Topic	Readings (Due on Week)	Assignments (Due on Week)
1	Course Introduction	Syllabus	Blackboard
2	Textbook and MindTap access	Blackboard	Cengage.com
3	Introduction to Virtual Computing Environment	Module 1 PP 1-48	none
4	Working w/ Oracle Virtual Box5	Module 2 PP 49-82	Quiz Module 1 Labs Module 2
5	Working w/ VM Ware Workstation 12	Module 3 PP 83-144	Quiz Module 2 Labs Module 3
6	Working w/ Datacenter Virtualization	Module 4 PP 145-198	Quiz Module 3 Labs Module 4
7	Working w/ Microsoft Hyper-V	Module 5 PP 199-236	Quiz Module 4 Labs Module 5
8	Working w/ Microsoft Hyper-V Virtual Manager	Module 6 PP 237-282	Quiz Module 5 Labs Module 6
9	Working w/ VMware V Sphere	Module 7 PP 283-320	Quiz Module 6 Labs Module 7
10	Working w/ VMware VCenter	Module 8 PP 321-382	Labs Module 8
11	Working w/ VMware VCenter	Module 8 PP 321-382	Quiz Module 8 Labs Module 8
12	Implementing Virtual Desktop	Module 9 PP 383-446	Labs Module 9
13	Using Virtual Computing in Cloud Computing	Module 10 PP 447-502	Quiz Module 9 Labs Module 10
14	Makeup work and retakes	All Modules	Quiz Module 10
15	Review for Final	All Modules	Review

Week	Topic	Readings (Due on Week)	Assignments (Due on Week)
16	Final	Final	N/A

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Chapter Quiz or Test 40%
- Attendance 10%
- Labs 30%
- Final Exam 20%

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

LIT does not use +/- grading scales

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, accessible on the LIT website.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at Online Learning Requirements. A functional broadband internet connection, such as DSL, cable, or Wi-Fi 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 Special Populations - Lamar Institute of Technology (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.

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:** 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. If you have missed a previous test, you must still take the final exam to substitute for that grade.
- **Course Grade Requirement:** A grade of 'C' or better must be earned in this course for credit toward the degree requirement.

CERTIFICATION REQUIREMENT

Cyber Security and Networking majors are required to earn a certification in at least one of the following areas prior to graduation.

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