

Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.

COURSE SYLLABUS

CSIS 535

COMPUTER NETWORKS

COURSE DESCRIPTION

Concentrated on computer networks, students will learn the fundamentals of networking, network management, and network design. Areas will include, but are not limited to, the abstraction layers of network communication, wireless networks, mobile networks, network security, network architecture, basic network design, and network management. Students will learn how to analyze and build basic computer network designs that meet the needs of changing business environments.

RATIONALE

The principles of networking and telecommunications are built upon standard protocols such as those found in the definition of the TCP/IP protocol suite. The innovations over the past decade in communications hardware, software and related architectures have changed the way IT facilitates business regarding time and location. The traditional seven-layer model that has allowed standardization and engineering simplicity has been refined by this four-layer approach that we refer to as the “Internet.” It is imperative that both the practitioner and the business-using community understand and leverage the communications resource to cost-effectiveness.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the [Academic Course Catalog](#).

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: <http://bookstore.mbsdirect.net/liberty.htm>

III. ADDITIONAL MATERIALS FOR LEARNING

- A. Computer with basic audio/video output equipment
- B. Internet access (broadband recommended)
- C. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

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

- A. Discuss the relevance of course material and the use of information technology to a biblical worldview.
- B. Summarize the various abstraction layers of computer network communication.
- C. Demonstrate the principles of network security.
- D. Contrast different types of network management.
- E. Build a fundamental network design to solve a business problem.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and lecture presentations/notes
- B. Course Requirements Checklist
After reading the Course Syllabus and [Student Expectations](#), the student will complete the related checklist found in Module/Week 1.
- C. Discussion Board Forums (4)
Discussion boards are collaborative learning experiences. Therefore, the student is required to create a thread in response to the provided prompt for each forum.
- D. Lab Assignments (3)
The student will complete 3 practical assignments that involve different network configurations that influence the effectiveness of the enterprise. Each assignment builds upon the previous assignment. This will enable the student to see different real-life network designs and will allow him/her to experience how changing a few components in a network can improve overall company performance.
- E. Comprehensive Lab Assignment
The student will complete a Comprehensive Lab Assignment that will implement the information taught and learned throughout the length of the course.
- F. Quizzes (4)
Each quiz will cover the Reading & Study material for the assigned modules/weeks.

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist	10
Discussion Board Forums (4 at 50 points each)	200
Lab Assignments (3 at 100 pts ea)	300
Comprehensive Lab Assignment	200
Quizzes (4 at 75 pts ea)	300
Total	1010

A. Scale

A = 940–1010 A- = 920–939 B+ = 900–919 B = 860–899 B- = 840–859
C+ = 820–839 C = 780–819 C- = 760–779 F = 0–759

B. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

COURSE SCHEDULE

CSIS 535

Textbook: Forouzan, *Data Communications and Networking* (2013).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Forouzan: chs. 2, 15, 17 1 presentation	Course Requirements Checklist Class Introductions DB Forum 1 Quiz 1	10 0 50 75
2	Forouzan: chs. 18–19 2 presentations	Lab Assignment 1	100
3	Forouzan: chs. 20–22 1 presentation	DB Forum 2 Quiz 2	50 75
4	Forouzan: chs. 23–24 1 presentation	Lab Assignment 2	100
5	Forouzan: chs. 25–26 2 presentations	DB Forum 3 Quiz 3	50 75
6	Forouzan: chs. 27–28 1 presentation	Lab Assignment 3	100
7	Forouzan: ch. 29 1 presentation	DB Forum 4 Quiz 4	50 75
8	Forouzan: chs. 30–32 2 presentations	Comprehensive Lab Assignment	200
TOTAL			1010

DB = Discussion Board

NOTE: Module/Week one begins on Monday and ends at 11:59 p.m. (ET) on Friday.
Modules/Weeks 2-8 begin on Saturday and end at 11:59 p.m. (ET) on Friday.