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 <u>not</u> be used to purchase course materials.

COURSE SYLLABUS

BMIS 520
IT INFRASTRUCTURE

COURSE DESCRIPTION

This course explores the design, implementation, and management of digital networks. Topics will include telecommunications fundamentals, server architecture, as well as cluster and grid computing. The course will explore the development of an integrated technical architecture (hardware, software, networks, and data) to serve organizational needs in a rapidly changing and competitive technological environment.

RATIONALE

The course will explore the development of an integrated technical architecture (hardware, software, networks, and data) in order to serve organizational needs in a rapidly changing and competitive technological environment. This course explores the design, implementation, and management of digital networks.

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.   Integrate biblical principles within the field of information technology and infrastructure.

B.   Distinguish parallel and distributed computing systems.

C.   Contrast computing infrastructure used by competing organizations.

D.   Appraise advanced business technologies for scalable infrastructure.

E.   Create an infrastructure plan that will support the business objectives of an organization.

V.   COURSE REQUIREMENTS AND ASSIGNMENTS

A.   Textbook readings and lecture presentations

B.   Course Requirements Checklist

After reading the Syllabus and <u>Student Expectations</u>, the student will complete the related checklist found in Module/Week 1.

C.   Discussion Board Forums

The student is required to provide a thread in response to the provided prompt for each forum.

D.   IT Infrastructure Practical Assignments

The student will complete practical assignments that involve how different network configurations affect network performance. 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 performance.

E.   IT Infrastructure Projects

IT infrastructure projects will focus on comprehensive re-design and new design of a hypothetical organization that is expanding its products and services.

F.   Exams

The Midterm and Final Exams will cover the Reading & Study materials for the modules/weeks in which they are assigned.

VI.   COURSE GRADING AND POLICIES

A.   Points

Course Requirements Checklist		10
Discussion Board Forums (1 at 40 pts, 1 at 100 pts)		140
IT Infrastructure Practical Assignments (2 at 30 pts ea)		60
IT Infrastructure Projects (2 at 200 pts ea)		400
Midterm Exam	(Modules 1–4)	200
Final Exam	(Modules 5–8)	200
	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

BMIS 520

Textbook: Stallings & Case, *Business Data Communications* (2013).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Stallings & Case: chs. 1-3 1 presentation	Course Requirements Checklist DB Forum 1	10 40
2	Stallings & Case: chs. 4–6 1 presentation	IT Infrastructure Practical Assignment 1	30
3	Stallings & Case: chs. 7–9 1 presentation	Midterm Exam	200
4	Stallings & Case: chs. 10–12 1 presentation	IT Infrastructure Practical Assignment 2	30
5	Stallings & Case: chs. 13–15 1 presentation	IT Infrastructure Project Phase I	200
6	Stallings & Case: chs. 16–17 1 presentation	DB Forum 2	100
7	Stallings & Case: chs. 18–19 1 presentation	IT Infrastructure Project Phase II	200
8	Stallings & Case: chs. 1–19 1 presentation	Final Exam	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.