

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

BIOM 525

HUMAN PHYSIOLOGY LECTURE

COURSE DESCRIPTION

This is a concentrated, comprehensive course that provides the student with a high level of understanding of the physiological basis of medicine. The essential concepts of physiology and mechanisms of body function are presented at various levels of organization ranging from cellular and molecular to tissue and organ system levels. Emphasis is placed on understanding the integrated regulation of various body processes among the major systems. This course precedes BIOM 526 Human Physiology Lab. BIOM 525 and 526 are equivalent to BIOM 515.

RATIONALE

A proper grasp of human physiology is integral to learning and practicing medicine. This course is designed to equip students with the analytical skills first to recognize problems and apply rational concepts in solving those problems. This is what the physician does all day. This course is designed to introduce students to the systemic functions of the body and the means the body uses to maintain homeostasis. This course attempts to explore and unravel the intricate complexities of the human body (which is God's masterful creation), as our act of worship to the Almighty God.

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. Blackboard [recommended browsers](#)
- D. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

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

- A. Identify examples of the interrelationship that exists between bodily systems.
- B. Explain how homeostasis is maintained throughout the systems.
- C. Describe the cellular and molecular basis of membrane physiology.
- D. Explain the nervous and endocrine systems and how they control other bodily systems.
- E. Describe the function of the body's muscles and how they operate.
- F. Identify components of the cardiovascular system and explain how they function.
- G. Describe the function of the respiratory system.
- H. Describe the urinary system and how it helps regulate body fluids.
- I. Explain how the body digests food sources and metabolizes them.
- J. Predict the ways changes in one system will affect other systems.
- K. Evaluate published literature in physiology.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

- A. Textbook readings and lecture presentations
- 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 (2)

Discussion boards are collaborative learning experiences. Therefore, the student is required to create a thread in response to the provided prompt for each forum. Each thread must be a minimum of 400 words and demonstrate course-related knowledge. In addition to the thread, the student is required to reply to 2 other classmates' threads in each forum. Each reply must be a minimum of 150 words.

- D. Papers (2)

The student will write two 4-10 page research-based papers on the provided topics within Blackboard. The papers must include at least 15 scholarly references, not counting the course textbook and the Bible. Each paper will be submitted via SafeAssign.

- E. Quizzes (8)

Each quiz will cover the Reading & Study material for the module/week in which the quiz is due. Each quiz will be open-book/open-notes, contain 25-50 multiple-choice questions, and have a 45-60 minute time limit.

VI. COURSE GRADING AND POLICIES**A. Points**

Course Requirements Checklist	10
Discussion Board Forums (2 at 150 pts ea.)	300
Papers (2 at 150 pts)	300
Quizzes (8 at 50 pts ea.)	400
Total	1010

B. 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 D+ = 740–759 D = 700–739
 D- = 680–699 F = 0–679

C. Disability Assistance

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

If you have a complaint related to disability discrimination or an accommodation that was not provided, you may contact ODAS or the Office of Equity and Compliance by phone at (434) 592-4999 or by email at equityandcompliance@liberty.edu. Click to see a full copy of Liberty's [Discrimination, Harassment, and Sexual Misconduct Policy](#) or the [Student Disability Grievance Policy and Procedures](#).

COURSE SCHEDULE

BIOM 525

Textbook: Costanzo, *Physiology* (2018).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Costanzo: Ch 1 3 presentations	Course Requirements Checklist Class Introductions Quiz 1	10 0 50
2	Costanzo: Ch 2 - 3 1 presentation	DB Forum 1 Quiz 2	150 50
3	Costanzo: Ch 4 1 presentation	Quiz 3	50
4	Costanzo: Ch 5 1 presentation	Paper 1 Quiz 4	150 50
5	Costanzo: Ch 6 - 7 1 presentation	Quiz 5	50
6	Costanzo: Ch 8 1 presentation	Paper 2 Quiz 6	150 50
7	Costanzo: Ch 9 1 presentation	Quiz 7	50
8	Costanzo: Ch 10 1 presentation	DB Forum 2 Quiz 8	150 50
TOTAL			1010

DB = Discussion Board

NOTE: Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.