

# LINCOLN UNIVERSITY

## SCI 31 – Human Biology

## **Course Syllabus**

## Spring 2025

**Instructor:** Dr. Khatia Mania

**Lecture Schedule:** Tuesday 12:30 – 3:15 pm

**Credits:** 3 units (45 hours of lectures)

**Pre-requisites:** None

Level: Introductory (I)

Office Hours: By appointment

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## **TEXTBOOK:**

1. Human Biology: Concepts and Current Issues, 9th edition (2022) by Michael D. Johnson (Author). ISBN-10: 0135847176; ISBN-13: 978-0135847176

2. Human Biology: Concepts and Current Issues by Michael D. Johnson, 7th edition (2013), ISBN-10: **0321821653**; ISBN-13: **978-0321821652** 6th edition (2011), ISBN-10: 0321701674; ISBN-13: **978-0321701671** 

## Supplemental Textbooks:

- 1. **Physiology** by Robert M. Berne, Matthew N. Levy, 6th edition (2009), ISBN-10: **032307362X**; ISBN-13: **978-0323073622** 5th edition (2003), ISBN-10: **0323022251**; ISBN-13: **978-0323022255**
- 2. **The Human Body in Health and Disease** by Barbara Janson Cohen 14th edition (2014), ISBN-10: **1451192800**; ISBN-13: **978-1451192803** 12th edition (2012), ISBN-10: **1609139054**; ISBN-13: **978-1609139056**
- 3. **The Human Body in Health & Disease** by Gary A. Thibodeau, Kevin T. Patton 6th edition (2013), ISBN-10: **0323101240**; ISBN-13: **978-0323101240** 5th edition (2009), ISBN-10: **0323054927**; ISBN-13: **978-0323054928**

**Last Revision:** December 2024

**NOTE:** Instructor may change this syllabus and course schedule at any time

according to the judgment as to what is best for the class. Any changes

will be declared ahead of time in class.

## **CATALOG DESCRIPTION**

The main purpose of the course is to study the organization (anatomy) and function (physiology) of the human body, from the single cell to the coordinated whole. Includes a consideration of body structure and function, reproduction, development, heredity and evolution, examination of the aspects of modern biology as it impacts the human species. (3 units)

#### **COURSE OBJECTIVES**

Upon completion of this course, students should complete homework projects and presentations. Student should be able to:

- Demonstrate knowledge of human biology;
- Understand each body system;
- > Understand functioning of human body as a system.

## COURSE LEARNING OUTCOMES<sup>1</sup>

	Course Learning Outcome	Program	Institutional	Assessment	
		Learning	Learning	activities	
		Outcomes	Outcomes		
1	Describe the physical structures of the body	PLO 1	ILO 1a, ILO	In-class	
	and their functions.	PLO 4	2a, ILO 3a	activities,	
	Explain the processes of inheritance,			quizzes,	
	reproduction, and development.			midterm and	
	Explain the general mechanism of			final exams.	
	homeostasis.				
	Understand the major function of body				
	systems.				
2	Understand the functioning of organs of	PLO 2	ILO 1a, ILO	Group	
	body systems such as: muscular-skeletal,		2a, ILO 3a,	discussions,	
	digestive, respiratory, cardiovascular,		ILO 4a	quizzes,	
	nervous, endocrine, urinary and reproductive			projects.	
	systems.				
3	Understand DNA, genetic engineering.	PLO 1	ILO 1a, ILO	In-class	
	Aging and related problems. Cancer. Early	PLO 3	2a, ILO 3a,	activity,	
	recognition and treatment of cancer.	PLO 6	ILO 4a, ILO	quizzes,	
		PLO 7	5a, ILO 7a	midterm and	
				final exams,	
				projects.	

<sup>&</sup>lt;sup>1</sup> Detailed description of learning outcomes and information about the assessment procedure are available at the <u>Learning Outcomes Assessment</u> section of LU website.

## INSTRUCTIONAL METHODS

Instructional methods will include lectures, classroom activities presentations and video material.

Assignments and projects require students to actively use resources of the library. Detailed guide to business resources of the library as well as the description of Lincoln University approach to information literacy are available at the LU Library website (lincolnuca.libguides.com).

## **HOMEWORK**

The goal of the homework is to help students achieve the course learning objectives. Homework consists of two parts.

First part is to read the textbooks and materials to review and analyze the lecture given during a previous class session. Students are expected to spend six hours for each class session outside of class in completing the reading assignments related to each lecture. These assignments are graded through short quizzes given at the beginning of the following class session.

Second part of the homework consists of a project presented at the end of the course. Each student will choose the topic for presentation or will be assigned one by the instructor. The presentation should be approximately 10 minutes long and with 5 minutes for a discussion. The topic and format for the presentation will be discussed in class for more details. A final draft of the presentation must be submitted for review one week prior to the presentation.

## **Evaluation Criteria for Project:**

Clinical statement: 2%

Background information: 2%

AAAAA Slide content: 2% Slide design: 1%

Resolution of the problem: 2%

Oral presentation in class: 1%

Total: 10% of all the course grading elements

#### **Ouizzes:**

Students will take about 10 - 11 quizzes; about 10-15 questions each. These quizzes will address the detailed content and major concepts presented in the lectures, lecture outlines and text readings to evaluate students' work outside of the classroom. Each quiz will be timed; 1 minute for every question to complete. No make-up quizzes for missed quizzes will be administered (students will receive no score for missed quizzes) unless student provides legal documents excusing from the class. The document should be presented and make up test done within a week after missed date.

## **EVALUATION**

- Quizzes Reading assignments will be given as described above. Quizzes will be given at the beginning of class sessions.
- 2. Project — Each student needs to present a completed project a week before the final examination.
- 3. Class attendance and class activity.
- Midterm examination. 4.
- 5. Final examination.

#### **GRADING**

All activities will be graded according to the points as shown below.

Grade	Α	A-	B+	В	В-	C+	C	C-	D+	D	F
Points	93-100	90-92	87-89	84-86	81-83	78-80	76-77	74-75	72-73	70-71	0-69

The final grade for the course will be given as the total weighted score for all activities according to the percentage shown in the table below.

Activity	Percent
Class Attendance	10%
Class Activity	10%
Quizzes	20%
Midterm Exam	20%
Project	10%
Final Exam	30%
Total	100%

#### **COURSE GUIDELINES**

To successfully complete this course, the students must pass the quizzes, homework and final exam portions with a 70% or better. Students should attend all the class meetings. However, considering possible urgent situations, students may be absent from maximum four class meetings with prior notice to the instructor. Three late arrivals (more than 15 minutes late) would affect the grade. Students cannot take the test after being more than 15 minutes late after the start of testing time. That test will not be made up and there will be no grade for that test. Leaving the class early will also affect the grade. Students will be dismissed from the class after missing 3 consecutive classes by reporting to Registrar.

The term grade is based on attendance, class activity, project, midterm and sum of quizzes, and final examination. Individual projects will be assigned at the beginning of the semester. Project is due by the last meeting before the final examination. No project will be accepted after the due date.

If students have missed the class without a valid reason, no make-up for quizzes and presentations will be allowed. Students can retake only one unsatisfactory quiz. No retake for missed or failed midterm examination. Final examination, if failed, can be retaken only once. If failed second time, the subject is considered failed. If total performance of the class is below 70% the class is considered failed even if the student gets the highest score on one of the parts of the grading system. Dictionaries are allowed during the class time. No electronic devices during the test time.

All the students are informed of no cheating policy. During the written exam, any student observed in a situation that could be considered suspicious (e.g., an open book within his/her field of vision, looking around or checking a cell phone or other wireless device, talking to other students, etc.) must terminate the test, will get no grade and will not be allowed to retake that test. Any applicant found cheating on a written exam repeatedly will be failed for the exam and prohibited from retaking the written exam without permission from the dean.

Students cannot leave the room during the test/exam. As soon as student leaves, his/her exam is considered finished.

Lecture is not a substitute for textbooks. Students should read the textbooks and use other sources to be prepared for tests. Lecture is to guide the students to prepare for the course subjects.

## **SCHEDULE OF TOPICS**

- 01/28/2025 Skeletal System
- 02/04/2025 Muscular System. Quiz # 1
- 02/11/2025 Respiratory System. Quiz # 2
- 02/18/2025 Digestive System, Nutrition. Quiz # 3
- 02/25/2025 Circulatory System. Quiz # 4
- 03/04/2025 Blood and Blood Vessels Lymphatic System, Lymph Nodes and Lymph Vessels.
- 03/11/2025 Midterm Exam
- 03/25/2025 Nervous System and Organs of Special Senses.
- 04/01/2025 Endocrine System. Quiz # 5
- 04/08/2025 Urinary System. Quiz # 6
- 04/15/2025 Male Reproductive System. Female Reproductive System. Quiz # 7
- 04/22/2025 Human development embryo, fetus. Role of DNA in human body. DNA technology and genetic engineering. Quiz # 8
- 04/29/2025 Development and aging. Cancer: uncontrolled cell division and differentiation.
- 05/06/2025 Review and Final Examination
- 05/13/2025 Presentations of Projects

### **DUE DATE**

Due date for the project is 05/13/2025