



# LINCOLN UNIVERSITY

## SCI 31 – Human Biology

### Course Syllabus

Spring 2023

**Instructor:** Dr. Khatia Mania  
**Lecture Schedule:** Tuesday 12:30 – 3:15pm  
**Credits:** 3 units (45 hours of lectures)  
**Pre-requisites:** None  
**Level:** Introductory (I)  
**Office Hours:** By appointment  
**E-mail:** [mania@lincolnuca.edu](mailto:mania@lincolnuca.edu)  
**Telephone:** (510) 238-9744

#### TEXTBOOK:

**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 2022

**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>**

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

**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. A detailed guide to business resources of the library as well as the description of Lincoln University

<sup>1</sup> Detailed description of learning outcomes and information about the assessment procedure are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

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## **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%
- Slide content: 2%
- Slide design: 1%
- Resolution of the problem: 2%
- Oral presentation in class: 1%

Total: 10% of all the course grading elements

### **Quizzes:**

Students will take 10 quizzes; 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. If a student takes more than ten quizzes, only the best ten quiz scores will be used in calculating the student's total points. 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**

1. 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.
4. Midterm examination.
5. Final examination.

**GRADING**

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

Grade	A	A-	B+	B	B-	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 would affect the grade. Student 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.** Dictionaries are allowed during the class time. **No electronic devices during the test time.**

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, etc.) but no cheating is observed, will be warned. Once warned, any applicant found cheating on written exam 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.

**SCHEDULE OF TOPICS**

01/24/2023 – Skeletal System

01/31/2023 – Muscular System. Quiz # 1

02/07/2023 – Respiratory System. Quiz # 2

02/14/2023 – Digestive System, Nutrition. Quiz # 3

02/21/2023 – Circulatory System. Quiz # 4

02/28/2023 – Blood and Blood Vessels Lymphatic System, Lymph Nodes and Lymph Vessels.

03/07/2023 – **Midterm Exam**

03/21/2023 – Nervous System and Organs of Special Senses. Quiz # 5

03/28/2023 – Endocrine System. Quiz # 6

04/04/2023 – Urinary System. Quiz # 7

04/11/2023 – Male Reproductive System. Female Reproductive System. Quiz # 8

04/18/2023 – Human development — embryo, fetus. Role of DNA in human body. DNA technology and genetic engineering. Quiz # 9

04/25/2023 – Development and aging. Cancer: uncontrolled cell division and differentiation. Quiz # 10

05/02/2023 – Review and **Final Examination**

05/09/2023 – **Presentations of Projects**

**DUE DATE**

**Due date for the project is 05/09/2023**