



# LINCOLN UNIVERSITY

## SCI 31 – Human Biology

### Spring 2018 Course Syllabus

**COURSE NUMBER:** SCI 31

**COURSE TITLE:** Human Biology

**COURSE CREDITS:** 3 units (45 lecture hours)

**LEVEL:** Introductory (I)

**BASIC INFORMATION:**

Class Meeting Hours: Wednesday 3:30pm – 6:15 pm

Room number: TBA

Professor's name: Dr. Khatia Mania

Office Hours: by appointment

Contact Telephone: (510) 238-9744

E-mail: [mania@lincolnuca.edu](mailto:mania@lincolnuca.edu)

**TEXTBOOKS:**

**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**

**COURSE 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 LEARNING OUTCOMES:**

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.

**Upon successful completion of this course, students are able to do the following:**

	Course outcome	PLO	Assessment
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.	Demonstrate proficiency in college-level mathematics, English, sciences, humanities, and social sciences	
2	Understand the functioning of organs of body systems such as: musculo-skeletal, digestive, respiratory, cardiovascular, nervous, endocrine, urinary and reproductive systems.	Develop basic understanding of bioethics' standards acceptable in the field of diagnostic imaging.	
3	Understand DNA, genetic engineering. Aging and related problems. Cancer. Early recognition and treatment of cancer.	Think critically and apply common sense in approaching and solving DI and real-world problems.	

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### **INSTRUCTIONAL METHODS:**

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

### **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).

## EVALUATION:

Grading Scale:

95-100	A
90-94	A-
87-89	B+
84-86	B
81-83	B-
78-80	C+
76-77	C
74-75	C-
72-73	D+
70-71	D
69≤	F

<b>Class attendance</b>	10%
<b>Class activity</b>	10%

<b>Quizzes</b>	20%
<b>Midterm</b>	20%
<b>Project</b>	10%
<b>Final exam</b>	30%
	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.

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

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

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 a student leaves, his/her exam is considered finished.

## **CLASS SCHEDULE OF TOPICS:**

01/17/2018 – Skeletal System

01/24/2018 – Muscular System. Quiz # 1

01/31/2018 – Respiratory System. Quiz # 2

02/07/2018 – Digestive System, Nutrition. Quiz # 3

02/14/2018 – Circulatory System. Quiz # 4

02/21/2018 – Blood and Blood Vessels Lymphatic System, Lymph Nodes and  
Lymph Vessels. Quiz # 4b

02/28/2018 – Nervous System and Organs of Special Senses. Quiz # 5

### **Midterm Exam**

03/07/2018 – Endocrine System. Quiz # 6

03/21/2018 – Urinary System. Quiz # 7

03/28/2018 – Male Reproductive System.

04/04/2018 – Female Reproductive System. Quiz # 8

04/11/2018 – Human development — embryo, fetus. Role of DNA in human  
body. DNA technology and genetic engineering. Quiz # 9

04/18/2018 – Development and aging. Cancer: uncontrolled cell division and  
differentiation. Quiz # 10

04/25/2018 – **Presentations of Projects**

05/02/2018 – Review and **Final Examination**

**Due date for the project is 04/25/2018.**

**Syllabus Revised in January 2018**

**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.

## APPENDIX. Program and Institutional Learning Outcomes

<b>Institutional Learning Outcomes (ILOs)</b>	
<i>Graduates of the BS program of Lincoln University should be able to.</i>	
<b>1a</b>	Develop the habits and skills necessary for processing information based on intellectual commitment, and using these skills to guide behavior.
<b>2a</b>	Raise important questions and problems, and formulate them clearly and precisely in oral or written communication
<b>3a</b>	Act with dignity and follow the principles concerning the quality of life of all people, recognizing an obligation to protect fundamental human rights and to respect the diversity of all cultures.
<b>4a</b>	Focus on individual and organizational benefits; communicate to co-workers and company's leadership in facilitation of collaborative environment; to be honest and transparent with regard to their work, and to be respectful of the work of others.
<b>5a</b>	Display sincerity and integrity in all their actions, which should be based on reason and moral principles; to inspire others by showing mental and spiritual endurance
<b>6a</b>	Show creativity by thinking of new and better goals, ideas, and solutions to problems; to be resourceful problem solvers.
<b>7a</b>	Define and explain the boundaries, divisions, styles and practices of the field, and define and properly use the principal terms in the field

<b>Program Level Outcomes (PLOs)</b>	
<i>Students completing General Education courses in BS program will be able to.</i>	
<b>1</b>	Demonstrate proficiency in college-level mathematics, English, sciences, humanities, and social sciences.
<b>2</b>	Being able to interpret and apply arithmetical, algebraic, and statistical methods to solve problems
<b>3</b>	Communicate effectively in diagnostic field by applying Standard American English. Be able to use appropriate terminology accepted in DI field.
<b>4</b>	Think critically and apply common sense in approaching and solving DI and real-world problems.
<b>5</b>	Demonstrate proficiency in skills that sustain lifelong learning, particularly to think critically and responsibly. Be able to evaluate and integrate DI information.
<b>6</b>	Understand the responsibilities of active citizenship, community engagement, and social responsibility.
<b>7</b>	Develop basic understanding of bioethics' standards acceptable in the field of diagnostic imaging.

## Appendix B. Classification of LU Curriculum courses

Code	Classification	Description
<b>Courses &lt; 10, and 300A/300B</b>	Review (R)	Review courses are supplemental courses that are not a part of any program.
<b>Courses 10 - 99</b>	<b>Introductory (I)</b>	<b>Introductory undergraduate courses are designed to acquaint students with foundational concepts, ideas, and competences in a specific field of study as well as general education disciplines. General Education courses provide a background in the liberal arts and expose students to the fundamental aspects of human culture. They also help students to develop analytical and communication skills and foundation for advanced work in the major field of study.</b>
<b>Courses 100 - 199</b>	Developed (D)	Developed undergraduate courses build upon the concepts, ideas, and competences introduced in the Introductory level; expanding students' understanding of the specific field of study.
<b>Courses 200 - 286</b>	Advanced (A)	Advanced courses in undergraduate programs are intended to bring students' comprehensive knowledge of concepts, ideas, and skills in the specific field of study to the highest level within the baccalaureate programs.
<b>Courses 288 - 299</b>	Bachelor Assessment (BA)	Bachelor Assessment courses are structured to provide opportunity to assess students' achievements of set program learning outcomes.
<b>Courses 300 level w/o graduate prerequisites</b>	Mastery 1 (M1)	Mastery 1 courses introduce graduate level concepts and ideas in a specific field of study and provide an opportunity to initiate the development of graduate level competences.
<b>Courses 300 level with graduate prerequisites</b>	Mastery 2 (M2)	Mastery 2 courses build upon students' execution of Mastery 1 learning outcomes and allow for further development of students' mastery of concepts, ideas, and competences in the specific field of study.
<b>Courses 398, 399</b>	Mastery 2 / Assessment (M2A)	Mastery 2/Assessment courses are structured to provide opportunity to assess students' achievements of set program learning outcomes.



<b>Courses 400 level</b>	Mastery 2 / Research (M2R)	Mastery 2/Research courses employ individual research project to deepen students' understanding of the subject developed in lower level courses and to equip students with knowledge and skills required by MS and DBA degree programs.
<b>Courses 500 level</b>	Doctorate Assessment (DA)	Doctoral Assessment courses are doctorate level seminars and research activities fostering the highest level of professional expertise by providing continuous assessment and development of students' ideas and analytical skills in the context of the doctorate program.