



### HUDSON COUNTY COMMUNITY COLLEGE STEM COURSE SYLLABUS

TITLE OF COURSE: <u>Human Biology</u> NUMBER: BIO 107 CREDITS: 4

TERM: \_\_\_\_\_\_ YEAR \_\_\_\_\_

CLASS MEETING TIMES: \_\_\_\_\_

PREREQUSITE(S): <u>Exit Academic Foundations</u> COREQUISITE(S):

INSTRUCTOR:	
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OFFICE HOURS: LOCATION
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EMAIL ADDRESS: \_\_\_\_ PHONE: \_\_\_\_\_

1. COURSE DESCRIPTION: Human Biology is a four credit course gives students an overview of the anatomy and physiology of the human body organ systems. The cardiovascular, the lymphatic, immune, urinary, muscular, skeletal, nervous, and endocrine systems are studied. To understand the importance of food intake for cells energy needs, bod nutrition and the digestive system physiology are further detailed. The focus on the cell's structures and organelles function is required to comprehend the different aspects of the organ systems physiology. Special attention is also is also accorded to the study of human inheritance and evolution. The course ultimately deals with fundamental chemical concepts that needed to understand the biological process occurring in the human body.

## 2. COURSE OBJECTIVES:

Upon completion of this course, the following objectives will be achieved:

- 1. Explain how to formulate a scientific hypothesis and recognize steps involved in testing it
- 2. Recognize the characteristics of all living things organization, cells structure and function, tissues, homeostasis mechanism and chemistry life.
- 3. Describe the structure and functions of the body different systems and the maintenance of the body (cardiovascular, lymphatic & immune, digestive, respiratory, and urinary systems)
- 4. Analyze the structure and functions of the skeletal and muscular systems and their role in movement and support of the human body.
- 5. Compare and contrast skeletal, cardiac and smooth muscles.



- 6. Discuss the mechanism of integration, coordination and regulations in the human body and the anatomy of organs in the nervous and endocrine systems.
- 7. Describe the DNA, human genetics, Patterns of inheritance and evolution.
- 8. Discuss some pathological conditions in different organ systems and their effects in the human body.

## 3. TEXTBOOK REQUIRED:

- Textbook: Mader Human Biology 16th ed. McGraw hill ISBN 9781259689796
- Lab Manual Mader human Biology 16th ed. McGraw Hill ISBN 9781260482751

## 4. EVALUATION METHODS AND GRADE BREAKDOWN:

1. Two Exam	20%
2. Midterm	15%
3. Final Exam	25 %
4. Written assignments	10%
5. Two lab Practical exams	20%
6. Lab Reports	10%

## Grading Scale: A =95 or above, A- = 90-94.9, B+ = 85-89.9, B = 80-84.9

## B- =75-79.9 C+ = 70-74.9, C = 65-69.9, D = 60-64.9, F lower than 60

Lab reports to be submitted one week after the lab, no late reports will be accepted.

Detailed outline of suggested topics -

Week	Topic	Lab Topic	L.O
1st	Exploring Life and Science	Lab Orientation	SLO 1
		Scientific Method	
2 <sup>nd</sup>	Chemistry of Life	Microscopes	SLO 2
3 <sup>rd</sup>	Cell Structure and Function	Cells structure & function	SLO 2
4 <sup>th</sup>	Organization and Regulation of Body	Classification of tissue	SLO
	Systems		2,3,8
	Exam I		
5 <sup>th</sup>	Heart and Blood Vessels	Sheep heart dissection or	SLO 3,8
	Blood	anatomical models	
			1



6 <sup>th</sup>	The lymphatic and Immune System	Handout Placed type	SLO 3,8
7 <sup>th</sup>	Discretion Constant on 1 Netwitting	Blood type	CLO 2.9
/"	Digestive System and Nutrition	Digestive anatomical models	SLO 3,8
8 <sup>th</sup>	Midterm Exam	Lab Practical I	SLO 1- 3,8
9 <sup>th</sup>	Urinary System	Dissection of the Sheep Kidney or anatomical model	SLO 3,8
10 <sup>th</sup>	Skeletal System	Skeletal System. anatomical model	SLO 4,8
11 <sup>th</sup>	Muscular System	Muscular System. anatomical model	SLO 5,8
12 <sup>th</sup>	Nervous System Exam II	Dissection of the Sheep Brain, or anatomical model	SLO 6,8
13 <sup>th</sup>	The Endocrine System	Lab Practical II	SLO 6,8
14 <sup>th</sup>	Patterns of Inheritance DNA basic structure Evolution	Mitosis & Meiosis slides and anatomical model	SLO 7,8
15 <sup>th</sup>	Final Exam		SLO 1-8

- 5. ATTENDANCE POLICY: Students are expected to follow attendance guidelines as presented in the syllabus provided by the instructor. However, in case of an emergency or illness, students are advised to notify their instructor or counselor immediately. The instructor will determine the validity of the absence. The exceptions to instructor discretion exist when members of armed forces are called for training or assignment or any case where students are legally required to be elsewhere. Pending the submission of appropriate documentation reasonable accommodations for make-up work shall be provided, and in accordance with guidelines included in the syllabus. Attendance, punctuality and participation are required. Students missing more than 3 classes may receive a failing grade, or 10% reduction in the final total. Students missing more than 3 classes may receive a failing grade
- USE OF ELECTRONIC COMMUNICATION DEVICES: Cell phones and all other electronic devices are not allowed in the lecture or the lab time. They all must be turned off.



- 7. Safety Rules: Students Must follow all the safety rules during meeting in the lab meetings (follow the safety guidelines & rules). If you do not follow the rules you will be asked to leave the laboratory and will lose the credits for that lab.
- 8. DISABILITY SUPPORT STATEMENT: Students with disabilities who believe that they might need accommodations in this class are encouraged to contact Disability Support Services at (201) 360-4157, as soon as possible to better ensure that such accommodations are implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a Physician, Licensed Learning Disabilities Teacher Consultant (LDTC), Psychiatrist, Psychologist, Psychiatric Nurse, Licensed Social Worker or Licensed Professional Counselor, who is qualified to assess the disability that the student claims to have and make recommendations on accommodations for the student. <u>All information</u> provided to the Disability Support Services Program will be confidential between the program, professors involved with the student and individual <u>student.</u>

# 9. ACADEMIC INTEGRITY STATEMENT:

Academic Integrity Standards

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students earn college credits by their honest efforts. When they are awarded a certificate of degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principle of academic integrity include:

- Cheating on exams
- Reporting false research data or experimental results
- Allowing other students to copy one's work to submit to instructors
- Communicating the contents of an exam to other students who will be taking the same test
- Submitting the same project in more than one course, without discussing this first with the instructor
- Submitting plagiarized work. Plagiarism is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work



When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

"Mandatory Use of HCCC Email Address: Members of the HCCC community are required to check their official HCCC email address in order to stay current with College and course communications. All college business communication between faculty, students, and staff must be sent via an official HCCC email address. If an employee or student elects to forward or link his/her HCCC email to a separate and private account, that individual remains responsible for all material transmitted to that account. Employees of HCCC shall not be responsible for any material that remains undelivered, due to defects in the private non-HCCC accounts. Failure in the operations of private email accounts shall not be cause for excuse from communications between the student and the employee. Students that encounter difficulty with HCCC email should view the FAQ's section on the Portal. "

#### **Diversity, Equity, and Inclusion Statement**

Hudson County Community College (HCCC) fosters a welcoming environment that celebrates and encourages culturally responsive curricula, respects diverse viewpoints, and values discussions without censure or hostility. Our classrooms are strengthened by embracing all student voices and identities. The President's Advisory Council on Diversity, Equity, and Inclusion (PACDEI) encourages students to review DEI resources and initiatives at the following link:

https://myhudson.hccc.edu/teamsites/Pages/pacdei.aspx

#### Statement on Camera Usage in Remote Learning Environments

As a college, we strive to be student-centered and therefore encourage faculty to consider a student's individual circumstances (need for privacy, technological problems, etc.) when requiring that they turn on cameras during class. There is no legal prohibition on faculty requiring cameras be turned on during classes or college policy prohibiting such requests. If students are unable to turn their cameras on, they should communicate the circumstances to the faculty member. On-campus spaces are also available to students as an alternative to home or off campus online and remote instruction. The on-campus spaces include: Gabert Library L219, L221, L222, L419, STEM Building S217, and North Hudson Campus N224, N303D. Within these rooms,



students will have access to computers, web cameras, and headsets. If there are any issues with space capacity, there are several additional rooms that can be utilized