

Hudson County Community College

Course Title: Anatomy & Physiol	ogy I Course Number: BIO111
Prerequisites: Exit Academic Fo	undation English & Math
Credits: 4	
Instructor:	Phone:
Email:	
Office:	Office Hours:

COURSE DESCRIPTION: In this course students will learn the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships.

STUDENT OUTCOMES/OBJECTIVES:

Upon completion of this course students will be able to:

- 1. Define anatomy and physiology & describe homeostasis importance for living systems.
- 2. Analyze and apply the scientific method in the laboratory experiments.
- **3.** Identify the structural organization of the body, the anatomical positions, body cavities **&** the organ systems
- **4.** Define all chemical elements and explain chemical interactions between the elements and compounds.
- **5.** Compare the major tissue types in the body from the cellular to the system levels
- 6. Describe the integumentary system organs structures & functions
- **7.** Differentiate the structure of cartilages & bones with their locations in the body
- **8.** Differentiate between three types of muscular tissue, muscle cell contraction, name and location of the major muscles of the human body
- **9.** Describe the structural and functional classifications of the nervous system, the brain & special senses
- **10.** Distinguish the structures of the skeletal, muscular and nervous system in laboratory experiments using animal specimens and laboratory models
- **11.** Analyze disorders associated with each of the discussed systems.



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Required Text Book:

TEXT: Human anatomy & physiology. 11th or 12 editions. Elaine N.Marieb & Katja Hoehn ISBN:978-0134807409

LAB MANUAL: Human anatomy & physiology. 11th or 12 editions. Elaine N.Marieb & Katja

EVALUATION CRITERIA AND METHODS:

- 1. 2 lecture exams 10% each
- 2. 2 lab exams 10% each
- 3. Midterm: 20%
- 4. Lab Reports 15% (due one week after each experiment)
- 5. Final comprehensive exam: 25%

A (95-100), A- (90-94), B+ (86-89), B (80-85), B- (75-79)

C+ (71-74), C (65-70), D (60-64), F (LESS THAN 60)

Week	LECTURE	Laboratory	SOL
1 st	Introduction to the course Scientific Method –Homeostasis – Organizational levels of life – Anatomical terminology	Introduction to the lab	1,2
2 nd	Chemical level of Organization the chemistry of living organisms -	Chemistry lab	3,4
3 rd	Cellular Level of Organization	Microscope survey of different cells	4
4 th	Tissue Level of Organization	Dissection of fetal pig	4,5
5 th	The Integumentary System	Microscope survey of skin slides	5,6
6 th	Tissue and Bone Structure	Skeletal lab	7
7 th	Midterm Exam	Practical Exam I	1,2,3,4,5 ,6
8 th	The Skeleton	Skeletal lab	7,10,11



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15 th	Comprehensive Final Exam	Practical Exam II	1-11
	The Special Senses	dissection	
14 th	The Peripheral & Autonomic Nervous Systems	Lab on Senses, eye	9,10,11
13 th	The Brain and Cranial Nerves	Dissection of the Brain	9,10,11
12 th	Neural and the Spinal Cord		9,10,11
11 th	The Muscular System	Muscular lab	8,10,11
10 th	Skeletal Muscle Tissue	Muscular lab	8,10,11
9 th	Articulations	Joint lab	7,10,11

Attendance & Make Up Exams. 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. Make up exams will be given only in extenuating circumstances. It is your responsibility to let me know that you missed an exam. All make up exams are more difficult than the original.

<u>COURSE REQUIREMENTS.</u> Attendance, punctuality and participation are required. Students missing more than 2 classes may receive a filing grade. Cell phones should be turned off in the classroom.

Lab Format: Unless indicated otherwise, each laboratory exercise is set up for team of four-five students. Each student on the team is to participate in every aspect of the lab exercise. After each exercise, a formal lab report is handed in for grading. The lab reports are written (word processed) individually, not as a team, and handed in during the next lab session. You are required, by department policy, to follow all safety procedures. Each lab team is responsible for cleaning up their work area after every lab.



Hudson County Community College Library Component: Students are encouraged to use the library to complete their research paper. They may use database such as: Science @direct, EBSCO, and many others. The paper must follow the APA format and the student must select and extract a peer review research journal article, and write a two pages' review on that research article. You should use the HCCC library database and other resources

Incomplete: An INCOMPLETE grade for the course is given under specific conditions when a student, because of serious and unexpected reasons, cannot complete the requirements of the course. For example, if a student did not attend the final because of illness his or her excuse must be verified by a physician. Other absences from other assigned activities must be made up at another appointed time. To arrange for an incomplete grade, the student must see the instructor before final exam.

ACADEMIC INTEGRITY

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 or 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 instructors.
- 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.



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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.

DISABILTY SUPPORT SERVICES

Students with disabilities who believe that they might need accommodations in this class are encouraged to schedule an appointment with Disabilities 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. All information provided to the Disability Support Services Program will be confidential between the program, professors involved with the student, and individual student.

"<u>Mandatory Use of HCCC Email Address: Members of the HCCC community are</u> 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. "

USE OF ELECTRONIC COMMUNICATION DEVICES:

Cell phones and all other devices are not allowed during class or lab times. **All of them Telephone, IPod or computer**

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



Hudson County Community College 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.

Dr.Abdallah Mohammad Matari. PhD Professor & Coordinator of Biology STEM Chemical Hygiene Coordinator STEM Bulding - S504 263 Academy Street Jersey City, NJ, 07306 Tel: (201) 360-4296



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Laboratory Report

Title of Experiment Author's Name Course Instructor Date



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Introduction

- Provide background information.
- Describe any relevant observations.
- State hypotheses clearly

Materials and Methods

- List equipment or supplies needed.
- Provide step-by-step directions for conducting the experiment.

Results

- Present data using a drawing (figure), table, or graph.
- Analyze data.
- Summarize findings briefly.

Discussion and Conclusions

- Conclude whether data gathered support or do not support hypotheses.
- Include relevant information from other sources.
- Explain any uncontrolled variables or unexpected difficulties.
- Make suggestion for further experimentation.
- Answer questions from the lab manual

Reference List

• Cite the source of any material used to support this report.



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