

**Division of Earth, Life & Natural Sciences
Biology Department**

<https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/biology/>

BIOL. 2302: Anatomy & Physiology II | Lecture | # 18572

SPRING 2024 | 12Weeks (2.12.2024 – 5.12.2024)

Hybrid | Acres Home Campus, North East College | TuTh 2:00 p.m. - 3:20 p.m.

3 Credit Hours | 48 hours per semester

INSTRUCTOR CONTACT INFORMATION

Professor: Osaretin A. Oni MD, MSc, PhD

Office Phone:

Office: Acres Home Campus, Northeast College – Rm 119 **Office Hours:** by appointment

e-mail: osaretin.oni@hccs.edu
(preferred)

Room: Acres Home campus Rm 119

Days & Times: TuTh. 2:00 p.m. - 3:20 p.m.

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Preferred Method of Contact

I will respond to emails within 24-48 hours Monday through Friday; I will reply to weekend messages during the following week.

What's Exciting About This Course

You will learn so much about your life and living organisms. Do you know how the heart works? Are you male or female? What makes you male or female? How does your blood flow? How do you breathe? How do your kidneys eliminate waste? The course will look at how and why the body works the way it does. What happens? Anatomy and physiology is the study of life and living organisms. But what exactly does being ALIVE mean? What qualities make one a living organism? How do we stay alive? What processes help us stay alive? We will understand that Anatomy and Physiology are the opposite sides of the same biological coin.

Anatomy, provides a map of how a body is put together, human or animals.

Physiology is the instruction manual that explains how this miraculous machine works.

The information in this course will enable you to understand the life and living plus diseases and effects, as well as develop new habits to increase your personal success. You will use what you learn in this course; your knowledge will come in handy later in the course of your professional.

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Prerequisite and/or Co-Requisites

BIOL. 2302 requires Anatomy and Physiology I (Biol. 2301)

If you have enrolled in this course having satisfied this prerequisite, you have a higher chance of success than students who have not done so. Please carefully read the repeater policy in the [HCCS Student Handbook](#).

Canvas Learning Management System

All Biology sections utilize [Canvas](https://eagleonline.hccs.edu) (<https://eagleonline.hccs.edu>) to supplement in-class assignments, exams, and activities.

Open Lab Locations

[HCCS Open Computer Lab locations](#) may be used to access the Internet and Canvas. **USE FIREFOX OR CHROME AS THE INTERNET BROWSER.**

HCC Online Information and Policies

For online/hybrid students. As an online /hybrid student, you are responsible for all information/requirements provided by the online college. Here is the link to information about HCC Online classes <http://www.hccs.edu/online/>. This includes the mandatory online course prior to start of class.

Scoring Rubrics, Sample Assignments, etc.

When applicable, look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. <https://eagleonline.hccs.edu/login/ldap>

Course Overview

BIOL. 2302 is a Continuation of BIOL 2301 including the study of circulatory, respiratory, digestive, excretory, reproductive and endocrine systems. It is a Core Curriculum Course.

This course is intended for students majoring in one of the physical sciences or life sciences, engineering, or for students who are pursuing pre-professional programs in medicine, dentistry, pharmacy, veterinary medicine, or other health programs. The course is also beneficial to students who are preparing themselves for higher-level science courses in their respective curricula.

Core Curriculum Objectives (CCOs)

BIOL. 2302 satisfies the Life science requirement in the HCCS core curriculum. The HCCS Biology Discipline Committee has specified that the course address the following core objectives:

- **Critical Thinking:** Students will demonstrate the ability to engage in inquiry and analysis, evaluation and synthesis of information, and creative thinking by completing a written assignment such as a book report, research paper, or essay.
- **Communication Skills:** Students will demonstrate effective development, interpretation and expression of ideas through written, oral, and visual communication by completing a written assignment such as a book report, research paper, or essay.
- **Quantitative and Empirical Literacy:** Students will demonstrate the ability to draw conclusions based on the systematic analysis of topics using observation, experiment, and/or numerical skills by completing textbook reading assignments, completing assignments, and answering questions on quizzes and exams that pertain to Course Student Learning Outcome #2 below.
- **Social Responsibility:** Students will demonstrate cultural self-awareness, intercultural competency, civil knowledge, and the ability to engage effectively in regional, national, and global communities by completing textbook reading assignments, completing assignments, and answering questions on quizzes and exams that pertain to Course Student Learning Outcome #4 below.

nextLearning

Online on a Schedule (WS) – Students can take classes online at the scheduled class time that they select when enrolling. Students never come to campus, but log into their class on the scheduled dates and times using our learning management system (Canvas).

**Course Description
(ACGM)**

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

**Course Description
(HCC)**

To study the structure and function of the following human systems: Endocrine, Cardiovascular, Respiratory, Digestive, Lymphatic and Reproductive.

Course Goal

This course is intended to familiarize the Health Science Major with anatomy, morphology, and physiology of the above human body systems. It is intended for students majoring in one of the physical sciences or life sciences, engineering, or for students who are pursuing pre-professional programs in medicine, dentistry, pharmacy, veterinary medicine, or other health programs. The course is also beneficial to students who are preparing themselves for higher-level science courses in their respective curricula.

**Program Student
Learning Outcomes
(PSLO)**

The students will be able to:

1. Will display an understanding of biological systems and evolutionary processes spanning all ranges of biological complexity, including atoms, molecules, genes, cells, and organisms.
2. Will integrate factual and conceptual information into an understanding of scientific data by written, oral and/or visual communication. (This may include successful completion of a course-specific research project or a case study module).
3. Will demonstrate proficiency and safe practices in the use of laboratory equipment and basic laboratory techniques.
4. Will apply principles of the scientific method to problems in biology in the collection, recording, quantitative measurement, analysis and report of scientific data.

**Course Student
Learning Outcomes
(CSLO): 4 to 7**

The following Course Student Learning Outcomes with their associated assessment criteria are not meant to be all inclusive, and are meant to be used along with all other course learning outcomes and assessment devices, listed under Learning Objectives, in the determination of the student's final course grade. Completion of the specific Course Student Learning Outcomes listed below, at any assessment grading level, **does NOT and will NOT** guarantee the student that final course grade at the end of the semester!

The students will be able to:

1. Use anatomical terminology to identify and describe locations of major organs of each system covered.
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
3. Describe the interdependency and interactions of the systems.
4. Explain contributions of organs and systems to the maintenance of homeostasis.
5. Identify causes and effects of homeostatic imbalances.
6. Describe modern technology and tools used to study anatomy and physiology.

**Core Curriculum
Statement**

Lecture exams and class activities will enhance the learning process by giving the student the opportunity to demonstrate the basic intellectual competencies of reading, writing, speaking, listening, and showing critical thinking and problem solving ability.

Instructional Methods

1. Text assignments, and lectures topics will follow the schedule as much as possible. (*This instructor reserves the right to change or alter the schedule, if necessary*)
2. Major exams will be given according to the printed schedule. Concepts covered on exams may not have been fully addressed in lab or lecture. It is the student's responsibility to have text and lab materials fully studied.
3. Outside reading to enhance one's own understanding is strongly encouraged. The instructor on a regular basis may assign specific articles.
4. This instructor has an "open door" policy towards students. Please feel free to come in or call if you have any questions concerning course items or college life in general.

Student Assignments

Assignments have been developed that will enhance your learning. To better understand a topic, you will be given assignments on key information that you will need to remember for your success in your career as an educator. Students will be required to successfully complete the following: 4 Lecture exams, Assignment Homework(15%), Assignments Quizzes(15%), General Canvas Quizzes(10%), Lecture (50%)and Departmental exams(10%)

Student Assessment(s)

Lecture Exams (4)	50%
Assignment Quizzes	15%
Assignment Homework	15%
General Canvas Quizzes	10%
Departmental Final Exam	10%
Total Percentage	100%

Instructor's Requirements

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived.
- Facilitate an effective learning environment through class activities, discussions, and lectures.
- Description of any special projects or assignments.
- Inform students of policies such as attendance, withdrawal, tardiness and make up.
- Provide the course outline and class calendar which will include a description of any special projects or assignments.
- Arrange to meet with individual students before and after class as required.

To be successful in this class, it is the student's responsibility to:

- Attend class and participate in class discussions and activities
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts and all assignments
- Complete the field of study with a 70% passing score

- Students are responsible for reading text assignments *BEFORE* class time so that they may engage in discussion of the material.
- Lectures may expand the scope of the text.
- Students should make full use of study groups.
- Students are required to work together in small groups on specific assignments.
- Laboratory sessions coincide with lecture and reading material and include conducting experiments as well as dissections and observations of preserved specimens.
- Each student is required to write one formal typed report and make one class presentation.
- Students are encouraged to bring specimens pertaining to the material being covered; *however, nothing should be brought that could pose a health or safety risk.*

**Program/Discipline
Requirements**

Classroom Behavior

As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. Your instructor takes this responsibility very seriously and will inform members of the class if their behavior makes it difficult for him/her to carry out this task. As a fellow learner, you are asked to respect the learning needs of your classmates and assist your instructor achieve this critical goal.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
- Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of O or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

HCC Grading Scale:

The HCC grading scale is:

A = 100 – 90	4 points per semester hour
B = 89 – 80	3 points per semester hour
C = 79 – 70	2 points per semester hour
D = 69 – 60	1 point per semester hour
59 and below = F	0 points per semester hour
FX (Failure due to non-attendance)	0 points per semester hour
IP (In Progress)	0 points per semester hour
W (Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses.

To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP", "W", "AUD", "COM" and "I" do not affect GPA.

Incompletes

The grade of "I" (Incomplete) is conditional. A student receiving an "I" must arrange with the instructor to complete the course work within six months of the end of the incomplete term. After the deadline, the "I" becomes an "F." Upon completion of the coursework, the grade will be entered as I/grade on the student transcript. All "I"s must be changed to grades prior to graduation.

Instructor Grading Criteria

Your instructor will conduct quizzes, exams, and assessments that you can use to determine how successful you are at achieving the course learning outcomes (mastery of course content and skills) outlined in the syllabus. If you find you are not mastering the material and skills, you are encouraged to reflect on how you study and prepare for each class. Your instructor welcomes a dialogue on what you discover and may be able to assist you in finding resources on campus that will improve your performance.

Final letter grades will be assigned after computing individual final averages in percent as follows:

Final Average in Points	Letter Grade
900 – 1000	A
800 – 899	B
700 – 799	C
600 – 699	D
< 599	F

Instructional Materials

Textbook: Martini, F. H., et al: Fundamentals of ANATOMY & PHYSIOLOGY with Mastering bundle, 10th ed., Pearson Publishing, ISBN: 9781269897921 (HCC Bookstore)
 Mastering:
<https://pearsonmastering.com>

More Reading: Chukwu, H., Dikeocha, N., *et al*, eds.: Biol 2102 - HUMAN ANATOMY AND PHYSIOLOGY II, Bluedoor Publishing, Minneapolis, MN, 2018.

Biology textbook that can be used. Students should feel comfortable with having an electronic (PDF) version of a textbook. You can register and download the FREE textbook here: <http://openstaxcollege.org/textbooks/anatomy-and-physiology>

HCC Policy Statement: Access Student Services Policies on their Web site:
ADA, Academic Honesty, <http://www.hccs.edu/district/students/student-handbook/>
Student attendance, 3-
peater, Withdrawal
Deadline

Accommodations due to a Qualified ability HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/district/students/disability-services/>

Basic Needs Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so.

Campus Carry At HCC, the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/district/departments/police/campus-carry/>

HCC Policy Statement: Sexual Misconduct Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu

EGLS3 - Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the EGLS3 as part of the Houston Community College Student System online near the end of the term.

<http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/>

HCC-BookStore Phone Numbers:

Alief.....713-718-6656
Central.....713-528-0872
Eastside.....713-640-1441
Northline.....713-692-1472

Spring Branch.....713-468-5300
Westloop.....713-218-0391
Katy.....713-718-5982
Stafford.....281-499-6413

IMPORTANT DATES:

February 12 First day of class

February 21 Official day of record

February 12 President’s Attendance approval deadline

March 11 – 17 SPRING BREAK

March 29 – 31 SPRING HOLIDAY

April 11 Last Day for Administrative and Student Withdrawal

May 5 Last Day of Instruction

May 12 Semester ends

May 14 Grades available to students

REFUND/Withdrawal

February 9 100% refund

February 26 70% refund

February 29 25% refund

April 11 Last Day to Withdraw

Biology Program Information

The Biology area of study here at HCC covers the smallest and simplest organisms (microbiology) to the largest and most complex organisms (human anatomy and physiology, zoology, botany).

AWARD TYPES: Associate in Science

AREA OF STUDY: Science, Technology, Engineering & Math

Please visit link: <https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/biology/>

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints

Office of the Dean

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>

Department Chair Contact Information

Dr. Chukwuemeka Opara

Email: chukwuemeka.opara@hccs.edu

Phone: 713-718-5249

Course Calendar

BIOL 2302 – Anatomy & Physiology II 16 - Week Calendar / Regular Start / Tentative Calendar	
WEEK	AGENDA / ASSIGNMENTS Assignments are due by dates indicated unless prior approval has been obtained.
1 – 4	<p>Chapter 16: <i>The Endocrine System</i></p> <p>Chapter 17: <i>Cardiovascular System - Blood</i></p> <p>Chapter 18: <i>Cardiovascular System - The Heart</i></p> <p>Chapter 19: <i>Cardiovascular System - Blood Vessels</i></p> <p>Chapter 20: <i>The Lymphatic System and Immunity</i></p>
5 – 8	<p>Chapter 21: <i>The immune system</i></p> <p>Chapter 22: <i>The Respiratory System</i></p> <p>Chapter 23: <i>The Digestive System</i></p> <p>Chapter 24: <i>Nutrition, Metabolism and Energy balance</i></p>
9 – 12	<p>Chapter 25: <i>The Urinary System</i></p> <p>Chapter 26 : <i>Fluid, Electrolytes, and Acid-Base Balance</i></p> <p>Chapter 27: <i>The Reproductive System</i></p> <p>Chapter 28: <i>Pregnancy and Human Development</i></p> <p>Chapter 29: <i>Heredity</i></p>
Exam. schedules	<p><i>Exam 1: chapters 16,17,18</i></p> <p><i>Exam 2: Chapters 19-22</i></p> <p><i>Exam 3: chapters 23-25</i></p> <p><i>Exam 4: Chapters 26- 29</i></p>
	<p>Final Exams</p> <p>5/7/2024- Departmental</p>
<p>Exams dates are not fixed. However, exams will be ready online at the end of the chapters required for each exam (lockdown browser and webcam) and you will have 2days to complete them.</p>	