

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

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

# Biology 2302: Anatomy & Physiology II | Lecture | #13768

Fall 2019 | 16 Weeks (09.23.2019-12.15.2019) In-Person | Southeast, FM 122 | T / Th. 6.00 PM – 7.50 PM 3 Credit Hours | 48 hours per semester

# Instructor Contact Information

Instructor: Dr. Wilfred U Ajayi, MD, PhD., DTM&H.Office Phone: XXX-222-2222HCC Email: <a href="wilfred.ajayi@hccs.edu">wilfred.ajayi@hccs.edu</a>Office Location: Southeast- Eastside Campus

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 to discuss course topics.

#### **Instructor's Preferred Method of Contact**

Students can meet with me before and after class. You can email me if preferred. 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

1. Welcome to Anatomy and Physiology. We are so glad that you chose to give Houston Community College the benefit of your expertise. This is a two-course series. Anatomy and Physiology I and Anatomy and Physiology II. Biology 2301 and 2302 are 3 credit hour lecture courses while Biology 2101 and 2102 are 1 credit hour lab courses, both intended for students entering health care professions. Anatomy and Physiology II is the second part of the twocourse sequence. It is a study of the structure and function of the human body including the circulatory, respiratory, digestive, excretory, reproductive and endocrine systems. This course will continue to illustrate the importance of interrelationships among human body systems and regulation of physiological functions involved in maintaining homeostasis.

# My Personal Welcome

Welcome to Anatomy and Physiology 2 lecture. - I'm thrilled that you have chosen this course and I hope to inspire you to success in your chosen field of study.

At the end of this course, I expect that you will have a better understanding of human body structures and seemingly, their functions. So please visit me after class or contact me by email if/when you have any questions.

I expect students to conduct themselves appropriately while in class, on college property or in an online environment. Students who pose a threat to the safety of others will be subject to immediate withdrawal from the classroom. Please refer to the HCC Student Handbook.

## Prerequisites and/or Co-Requisites

The minimum requirements for enrollment in BIOL 2302 include BIOL 2301- The prerequisite is the continuation of BIOL 2301 including the circulatory, respiratory, digestive, excretory, reproductive and endocrine systems Core Curriculum course. Your enrollment in this course proves that you have successfully met these prerequisites. Please carefully read the repeater policy in the <u>HCCS Student</u> <u>Handbook</u>.

## Canvas Learning Management System

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

# **Open Lab Locations**

<u>HCCS Open Computer Lab locations</u> may be used to access the Internet and Canvas. USE <u>FIREFOX</u> OR <u>CHROME</u> 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 <u>http://www.hccs.edu/online/</u>. 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

## **Instructional Materials**

# **Required Resources**



The textbook listed below is *required* for this course. *"Fundamentals of Anatomy and Physiology"* (11<sup>th</sup> edition) by Martini et.al.

The book is included in a package that contains the text as well as an access code and are found at the <u>HCC Bookstore</u>. The access code can be used to register on Pearson Mastering Mylab for your semester assignments. You may either use a hard copy of the book or rent the e-book from Pearson. Order your book here: <u>HCC Bookstore</u>

# **Suggested Resources**

#### HCCS Biology Lab Study Pages Click here to access Biology lab study pages online.

### OER...

Additional faculty suggested resource(s): Other text titles for reference, Professor's PPTs, handouts, etc.

# **Other Instructional Resources**

#### Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the <u>HCC Tutoring</u> <u>Services</u> website for services provided.

#### Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <a href="http://library.hccs.edu">http://library.hccs.edu</a>.

#### **Supplementary Instruction**

Supplemental Instruction is an academic enrichment and support program that uses peerassisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <u>http://www.hccs.edu/resources-for/current-students/supplemental-instruction/</u>.

## **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)

Biology 2302 satisfies one of the life science requirements 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 (when applicable), and/or other skills by completing assignments, and answering questions on quizzes and exams that pertain to Course Student Learning Outcomes.
- **Teamwork** ability to consider different points of view and to work effectively with others to support a shared purpose or goal
- **Social Responsibility** intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
- Personal Responsibility ability to connect choices, actions and consequences to ethical decision-making

# Program Student Learning Outcomes (PSLOs)

# Program Student Learning Outcomes (PSLOs) for the Biology Discipline

- 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 reporting of scientific data.

# Course Student Learning Outcomes (CSLOs)

Completion of the specific course Student Learning Outcomes listed below does NOT and will NOT guarantee the student any specific final course grade at the end of the semester!

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

# Learning Objectives

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- Explain interrelationships among molecular, cellular, tissue, and organ functions in each system. Describe the interdependency and interactions of the systems.
- Explain contributions of organs and systems to the maintenance of homeostasis. Identify causes and effects of homeostatic imbalances.
- Describe modern technology and tools used to study anatomy and physiology.

# **Student Success**

Academic standards require a minimum of 3 study hours for every contact hour; meaning for a class that meets 3 hours per week, you need to budget and set aside a minimum of 9 hours each week to study and prep for your course success. Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Timely completion of assignments
- Participating in class activities
- Successful exam performance, including the mandatory final

There is no short cut for success in this course; it requires reading and studying the material using the course objectives as a guide.

# Instructor and Student Responsibilities

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 learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- 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
- Attain a raw score of at least 50% on the departmental final exam
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook

Version 2.1.FY2020

# Assignments, Exams, and Activities

## **Homework Assignment**

Homework assignment(s) at Pearson Mylab Mastering can be accessed online through Canvas and will cover all the chapters. The assignment has a course score grade of 200 points on a 1,000-point scale (see Grading Formula below).

### Exams

Week Two - Lecture Exam 1, will cover Chapters 18 through 19 Week Four - Lecture Exam 2; will cover Chapters 20 through 21 Week Six - Lecture Exam 3; will cover Chapters 22 through 23 Week Eight - Lecture Exam 4; will cover Chapters 24 through 25 Week Ten - Lecture Exam 5; will cover Chapters 26 through 27 Week Eleven - Lecture Exam 6; will cover Chapters 28 through 29 Each examination will consist of 50 multiple – choice questions. Each question is worth same score and each exam have a score of 100. Please bring your scantron form for each examination.

# **In-Class Activities**

Scheduled and unannounced quizzes and bonus quizzes will be given during class.

# Final Exam

All students will be required to take a comprehensive departmental final exam consisting of 50 multiple-choice questions. Students must provide their own Scantron sheet. Review of the course chapters and past test questions/answers will be executed before the District final.

You must get at least 50% (25 of 50) of the items correct on the final to pass the course (departmental decision). Any student who does not take a makeup exam by the end of the following long semester will receive a final exam grade of zero for the missed examination and may result in a course grade of F.

# Grading Formula

#### GRADE DETERMINATION:

Your grade will be determined by your scores on the assessments given by your instructor based on your performance on assignments, quizzes, chapters exams and final comprehensive exit examination.

#### LETTER GRADE ASSIGNMENT:

Grading Scale A = 90 - 100% B = 80 - 89.5% C = 70 - 79.5% D = 60 - 69.5% F = Score Below 60% FX (Failure due to non-attendance) IP (In Progress) W (Withdrawn) I (Incomplete)

#### GRADE CALCULATION:

Exams, 1, 2, 3, 4, 5 and 6 will each has 100 points	= 600
Assignments on all chapters for 2302	= 200
Quizzes	= 100
Final Comprehensive 2302 Exam (10%)	= 100

Total Score	= 1000
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#### **Incomplete Policy:**

In this course, the purposes of the "I" (incomplete) grade is for students who are caught up and passing at the student withdrawal deadline, and then have a medical or other problem that prevents them from completing the course. If you are not passing at the student withdrawal deadline, <u>you should drop yourself</u> from the course, or you will likely earn an "F." An incomplete "I" grade will be given only if all the following conditions are met:

- ✓ You have earned at least 85% of the available points by the date that the "I" grade is requested.
- You can provide documentation showing why you should earn an incomplete, such as a doctor's note, etc.
- ✓ You must be passing with a grade of "C" or better.
- ✓ You must request the incomplete in writing BEFORE THE FOURTH COURSE EXAM

 In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

HCC Grading Scale can be found on this site under Academic Information: http://www.hccs.edu/resources-for/current-students/student-handbook/

# **Course Calendar**

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Week	Lecture Schedule
One	- Chapter 18: The Endocrine System - Chapter 19; Blood
Тwo	- Chapter 20: The Heart - Lecture Exam 1; will cover Chapters 18 through 19
Three	- Chapter 21: Blood Vessels and Circulation - Chapter 22: The Lymphatic System and Immunity
Four	<ul> <li>Chapter 22: The Lymphatic System and Immunity continued</li> <li>Lecture Exam 2; will cover Chapters 20 through 21</li> </ul>
Five	- Chapter 23: The Respiratory System - Chapter 24: The Digestive System
Six	<ul> <li>Chapter 24: The Digestive System continued</li> <li>Chapter 25: Metabolism, Nutrition, and Energetics</li> <li>Lecture Exam 3; will cover Chapters 22 through 23</li> </ul>
Seven	- Chapter 25: Metabolism, Nutrition, and Energetics continued - Chapter 26: The Urinary System
Eight	- Chapter 26: The Urinary System continued - Lecture Exam 4; will cover Chapters 24 through 25
Nine	- Chapter 27: Fluid, Electrolyte, and Acid-Base Balance
Ten	- Chapter 28: The Reproductive System - Lecture Exam 5; will cover Chapters 26 through 27

Eleven	<ul> <li>Chapter 28: The Reproductive System continued</li> <li>Chapter 29: Development and Inheritance</li> <li>Lecture Exam 6; will cover Chapters 28 through 29</li> </ul>
Twelve	- "Comprehensive Review 18 through 29" - Final Exit Exam "District" for BIOL 2302

# **Syllabus Modifications**

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

# **Instructor's Practices and Procedures**

## **Missed Assignments**

Students are required to read assigned chapters and to complete chapters and quizzes (if assigned) on schedule. Additional announced and unannounced quizzes during lecture may be conducted throughout the semester. Additional assignments may be assigned as specified by the instructor. Only one make-up exam per semester is allowed (with proper documentation) and must be arranged with the instructor ASAP. There is no repeating of examinations or "dropping" of lowest grade/s.

Lecture exams will include multiple choice questions and occasional essay/short answer questions.

## Academic Integrity

This instructor is committed to a high standard of academic integrity in the academic community. In becoming a part of the academic community, students are responsible for honesty and independent effort. Failure to uphold these standards includes, but is not limited to, the following: plagiarizing written work or projects, cheating on exams or assignments, collusion on an exam or project, and misrepresentation of credentials or prerequisites when registering for a course. Cheating includes looking at or copying from another student's exam, orally communicating or receiving answers during an exam, having another person take an exam or complete a project or assignment, using unauthorized notes, texts, or other materials for an exam, and obtaining or distributing an unauthorized copy of an exam or any part of an exam. Plagiarism means passing off as his/her own the ideas or writings of another (that is, without giving proper credit by documenting sources). Plagiarism includes submitting a paper, report, or project that someone else has prepared, in whole or in part. Collusion is inappropriately collaborating on assignments designed to be completed independently. These definitions are not exhaustive. When there is clear evidence of cheating, plagiarism, collusion, or misrepresentation, disciplinary action may include but is not limited to requiring you to retake or resubmit an exam or assignment, assigning a grade of zero or "F" for an exam or assignment; or assigning a grade of "F" for the course.

Scholastic Dishonesty will result in a referral to the Dean of Student Services. Additional sanctions including being withdrawn from the course, program or expelled from school may be imposed on a student who violate the standards of academic integrity. See the link below for details.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance): http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/

### Attendance Procedures

Students should be on time for class and be prepared (having read and completed the assignments) with required materials including textbook. Complete attention during lecture is required. You are expected to attend all lecture classes and labs regularly. You are also responsible for materials covered during your absences. Instructors may be willing to consult with you for make-up assignments, but it is your responsibility to contact the instructor. Class attendance is monitored daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences. You may be dropped from a course after accumulating absences in excess of 12.5 percent of the total hours of instruction (lecture and lab). For example:

- For a 3 credit-hour lecture class meeting 3 hours per week (48 hours of instruction), you can be dropped after 6 hours of absence.
- For a 4 credit-hour lecture/lab course meeting 6 hours per week (96 hours of instruction), you can be dropped after 12 hours of absence.

Departments and programs governed by accreditation or certification standards may have different attendance policies. Administrative drops are at the discretion of the instructor. Failure to withdraw officially can result in a grade of "F" or "FX" in the course.

## **Student Conduct**

Students are always expected to be at their best behavior during schedule lectures and classes No food or drinks are allowed in the laboratory. In addition, no smoking is allowed. Students are expected to dress clean and comfortable

## Instructor's Course-Specific Information (As Needed)

Grades for lectures examination will be reviewed the following class date. Your grade will be valid towards your final semester grade and no dropping of grade

### **Electronic Devices**

Phone or other personal electronic devices are <u>not</u> to be used during class (lecture and lab). This includes making or taking a call, texting, playing games, checking email, surfing the web, anything that involves a phone or other personal electronic device. If circumstances require that you be available via phone, your phone can be on vibrate mode and you can return the call during our regular scheduled

breaks or exit the class to review the call. Notify your friends, family, employers, and anyone else who regularly contacts you that you will be in class and that you should be contacted only when necessary.

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

### **HCC Policies**

Here's the link to the HCC Student Handbook <u>http://www.hccs.edu/resources-for/current-students/student-handbook/</u> In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

# EGLS<sup>3</sup>

The EGLS<sup>3</sup> (Evaluation for Greater Learning Student Survey System) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS<sup>3</sup> surveys are only available for

the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

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

### Campus Carry Link

Here's the link to the HCC information about Campus Carry: <a href="http://www.hccs.edu/departments/police/campus-carry/">http://www.hccs.edu/departments/police/campus-carry/</a>

### HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID and activate it now. You may also use Canvas Inbox to communicate.

### Housing and Food Assistance for Students

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

This will enable HCC to provide any resources that HCC may possess.

# **Office of Institutional Equity**

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (<u>http://www.hccs.edu/departments/institutional-equity/</u>)

#### disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, 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 <a href="http://www.hccs.edu/support-services/disability-services/">http://www.hccs.edu/support-services/disability-services/</a>

## Title IX

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 <u>Institutional.Equity@hccs.edu</u> http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/

# 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.

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

# Department Chair Contact Information

Dr. DaeJan Grigsby Email: daejan.grigsby@hccs.edu Phone: 713-718-7775