



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

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

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**Biology 2301: Anatomy & Physiology I | Lecture | 10796**

Spring 2021 | SS 12 Weeks (2.16.2021-5.16.2021) | Flex Campus

**Cisco WebEx/In-Person | Central Campus | LHSB 304 | M/W 3:30 – 4:50 p.m.**

3 Credit Hours | 48 hours per semester

**Instructor Contact Information**

Instructor:	Dr. Parker, M.D.	Office Phone:	713-718-6712
Office:	Suite 215 Cubicle 222.12	Office Hours:	T-Th 3:00-5:00 p.m.
HCC Email:	<a href="#">Canvas InBox Email</a>	Office Location:	Central 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 just to discuss course topics.

**Instructor's Preferred Method of Contact**

Please use the "**Inbox**" feature in Canvas to send emails to me regarding anything related to your course. I **do not** respond to emails from personal accounts such as Gmail, Hotmail, AOL, etc. I will respond to emails within 24-48 hours Monday through Friday. I will reply to weekend messages during the following week.

**COVID-19 Reporting Procedure**

Everyone must fill out a pre-screening questionnaire called the HCC COVID-19 Pre-Screening. This must be completed the day you plan to come to campus, but before you arrive at HCC. Students are registered in the HCC COVID-19 Pre-Screening system and will receive an email every day with their unique link to complete the questionnaire prior to arriving at an HCC location.

If you are experiencing symptoms or have concerns about being exposed, please:

1. Stay home.
2. Contact your healthcare provider.
3. If **you are supposed to be on campus for class**, complete the HCC COVID-19 Pre-

- Screening questionnaire which will start our follow-up process. Also, let your professor know.
4. After completing questionnaire, email screenshot of the confirmation page to your professor.
  5. If **you do not need to be on campus**, complete the HCC COVID-19 Pre-Screening questionnaire which will start our follow-up process. Email screenshot of the confirmation page to your professor so they are aware and can work with you to determine next steps for completing your assignments.

## What's Exciting About This Course

You will learn so much about your life and living organisms. Do you know how the brain works? How memory works? Why the bones can break? How muscles work? How the heart sends blood to all the body structures with the oxygen the lungs bring in? 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? 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 career.

## My Personal Welcome

Welcome to Anatomy and Physiology—I'm delighted that you have chosen this course! I am very passionate about the human body and how it works, and I can hardly wait to pass that knowledge and passion on. I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I'm available during posted office hours to tackle the questions. My goal is for you to walk out of the course with a better understanding of the subject matter and its relationship to illnesses and health. So please visit me or contact me by email whenever you have a question.

## COURSE MODALITY

**Flex Campus** – Half of the Students enroll in classes will physically attend class on Monday's and the other half of students will physically attend class on Wednesday. When a student isn't attending in person, they are required to participate at the scheduled time online. Attendance will be taken for all student every class. We are working on a system to ensure all students have the opportunity to participate in person at times if they want. **If there are less than or equal to 9 students enrolled in the course, you will be expected to be present on EVERY Monday and Wednesday of scheduled lecture.**

## COURSE MATERIALS MODALITY

**First Day – Inclusive Access** – This course is a First Day – Inclusive Access Course. It includes an e-textbook/course materials fee that is lower than national textbook prices. All

students will have access to their textbooks online the first day of class via the Canvas LMS. **DO NOT PURCHASE** a book or access code for this course as you have already paid for your course materials through the registration process. Students have the option to opt out of this program and receive a reimbursement for the course material fee when class begins. This opt out period ends on the official day of record. The official day of record for this term is **02/25/2021**. After the official day of record, students will no longer be able to opt out and receive any reimbursement to their student account.

### Prerequisites and/or Co-Requisites

**Anatomy and Physiology requires** Math 0106 or higher placement by testing, must be placed in college level reading.

**Co-requisites:** None.

The recommendations for this course include College Level Reading as determined by SAT, ACT, TASP or successfully passing ENGL0305 with "C" or better. Biology 1406 (General Biology) is strongly recommended.

If you have enrolled in this course having satisfied these prerequisites and recommendations, 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.**

All biology sections utilize Canvas (<https://eagleonline.hccs.edu>) to supplement in class assignments, exams, and activities. The biology department requires a computer or iPad with the ability to download the Respondus Lockdown Browser (LDB) software and a webcam for online assessments. **Chromebooks and smartphones cannot be used for graded assessments for which the instructor requires LDB and webcam monitoring. If you do not have the capabilities for LDB with webcam you are advised to withdraw from this course and re-enroll in another course that does not require LDB and webcam monitoring.**

### 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.

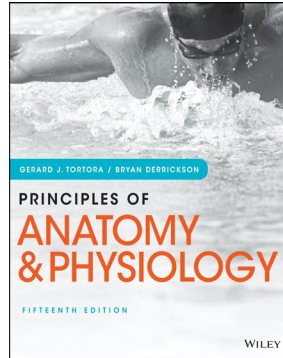
### Scoring Rubrics, Sample Assignments, etc.

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>

## Instructional Materials

### Required Resources



**Title:** Principles of Anatomy & Physiology 15th Edition

**Print:** Loose Leaf (full title)

**Publishers:** Wiley

**ISBN:** 9781119642275

- Please note that you **do not** need to purchase book or access code for this course as you have paid for your course materials including etextbook access during registration. The cost of digital course materials for this class were included in your student bill and are guaranteed to be the lowest cost available to purchase your required materials.
- Students have the option to opt out of the program **prior to the Official day of Record (February 25, 2021)**. Students who withdraw prior to the official day of record will have their course materials fee refunded within two days - two weeks after withdrawing.
- It is **NOT** recommended that you Opt-Out, as these materials are required to complete the course. If you do however choose to opt-out of these materials, you will not have access to the etextbook through Canvas and you will be responsible for purchasing the course materials at the full retail price. You can choose to Opt-Out on the first day of class, but you will be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended. To Opt out, click on the First Day Inclusive Access LTI Link on your canvas shell, then click on the opt-out button and confirm. The HCC Bursars/Finance Department will credit your account in 2-14 days.
- If you withdraw prior to the official day of record, please opt out first so your account will be credited faster.
- Faculty, for more information about the HCC Textbook Savings program, contact our bookstore [sm515@bncollege.com](mailto:sm515@bncollege.com) or 713-528-0872.

**ELECTRONIC RESOURCES FOR EXAMS:** To maintain the rigor and the integrity of the classes, Biology department **requires** all students attending online classes to use **Lockdown**

**Browser with Webcam for all exams.** You need a desktop or a Laptop with webcam for your exams. **ChromeBook Laptops**, Smartphones and tablets **will not** work.

If you do not have the capabilities for LDB with webcam you are advised to withdraw from this course and re-enroll in another course that does not require LDB and webcam monitoring.

### **LockDown Browser + Webcam Requirement** (For exams and quizzes taken at home)

This course requires the use of LockDown Browser and a webcam for online exams taken at home. The webcam can be the type that's built into your computer or one that plugs in with a USB cable.

Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature.

<https://www.respondus.com/products/lockdown-browser/student-movie.shtml>

### **Download Instructions**

Download and install LockDown Browser from this link:

<https://download.respondus.com/lockdown/download.php?id=355612798>

### **Once Installed**

- Start LockDown Browser
- Log into to Canvas
- Navigate to the quiz

Note: You won't be able to access a quiz that requires LockDown Browser with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

### **Guidelines**

When taking an online quiz, follow these guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
  - Avoid wearing baseball caps or hats with brims
  - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
  - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
  - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

## Getting Help

Several resources are available if you encounter problems with LockDown Browser:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- HCC help desk number is 713-718-8800. The help desks may want students to run the "System & Network Check" and the "Webcam Check" before they are contacted - and even, to forward the results of these checks at the time of opening a ticket.
- Respondus has a Knowledge Base available from support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product

If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it

## Other Instructional Resources

### Additional faculty suggested resource(s).

Bozeman Science: <http://www.bozemanscience.com/biology-main-page>

Crash Course: <https://thecrashcourse.com/courses/biology?page=2>

Amoeba Sister:

<https://www.youtube.com/playlist?list=PLwL0Myd7Dk1F0iQPGrjehze3eDpco1eVz>

Khan Academy: <https://www.khanacademy.org/science/biology>

HCCS Biology Lab Study Pages: [Click here to access Biology lab study pages online.](#)

## 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 [HCC Tutoring Services](#) 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 <http://library.hccs.edu>.

## Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted 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 <http://www.hccs.edu/resources-for/current-students/supplemental-instruction/>.





## Course Overview

Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

### Core Curriculum Objectives (CCOs)

BIOL. 2101 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.

### 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

<b>BIOL 2301: LEARNING OBJECTIVES</b>
<b>Introduction to Anatomy and Physiology</b>
Understand the levels of organization in the human body
Describe Homeostasis and understand how homeostatic mechanisms are regulated by negative and positive feedback.
Describe the anatomic terms used to define body regions, relative positions, body sections and body cavities.
Describe common medical imaging techniques in terms of their function and use in diagnosis of diseases.
<b>Chemical level of organization</b>
Know the atomic structure and 3 types of chemical bonds
Describe the structure and function of organic molecules.
Know the structure, chemical properties of water, concept of pH and the role of buffers in body fluid.
<b>Cellular level of organization</b>
Describe the structure and functions of the plasma membrane.
Describe the structure and function of the major organelles of the animal cell.
Explain the transport mechanisms across the plasma membrane.
Understand the significance of mitosis and meiosis.
<b>Tissues</b>
Explain the various types and functions of epithelial tissue
Describe the properties and functions of different types of connective tissue.
Compare the 3 types of muscle tissue - location, structure of their muscle fibers, and their action
Describe the basic types and functions of neural tissue
Explain the process of tissue repair
Describe different types of membranes - location and their function
<b>-Integumentary system</b>
Describe the structure and function of the epidermis and dermis.
Know the structure, location and functions of sudoriferous and sebaceous glands
Understand the role of the skin and hypodermis in thermoregulation
Describe the factors that contribute to normal and abnormal (pathological) skin color
Explain the response of the skin to injury and describe the repair process
Skin diseases, burns, skin cancer and protection
<b>Bone tissue</b>
Describe the gross and Histological Structure of Bone, including differences between Compact & Spongy
Discuss bone formation and growth, Intramembranous vs. Endochondral Ossification & Interstitial vs. Appositional Growth
Know the types of Fractures & Repair/Remodeling
Understand Bone's Role in Calcium Homeostasis
Describe the effect of aging and common bone disorders
<b>Axial system</b>
Identify the components of the axial skeleton

Identify the bones and major landmarks of the skull
Know the structure and curvature (normal and abnormal) of the vertebral column
Know the parts of a typical vertebra and be able to identify vertebrae from different regions of the vertebral column
Know the components, structure and articulation of the bones that make the thoracic cage
<b>Appendicular system</b>
Identify the components of the appendicular skeleton
Identify the bones, articulations and major landmarks of the upper and lower limbs.
Identify the bones, articulations and major landmarks of the pectoral and pelvic girdles.
Know the differences between the male and female pelvis
Distinguish between the false and true pelvis and their clinical significance.
<b>Articulation</b>
Describe the functional and anatomical classification of joints and provide examples
Describe the structure and functions of the components of a synovial joint and know the types of synovial joints.
Know the types of movements available at synovial joints
Describe the structure of the knee joints and associated clinical.
relate joint issues to clinical conditions like bursitis, bunions, arthritis, and knee injuries
<b>Muscle Tissue</b>
Compare and contrast the histology, location and function of skeletal, cardiac and smooth muscle tissues.
Structural organization of skeletal muscles with reference to fascicles, fibers and myofibrils and connective tissue.
Describe the internal structure of a skeletal muscle fiber.
Describe the molecular events of skeletal muscle contraction: Sliding filament theory
Describe how the energy requirements and metabolism of a muscle cell are met
<b>Muscular system</b>
Name the major external muscles involved in respiration, facial expression
Name the major external muscles of the body with origin and insertion.
Know the functions of the major external muscles of the body
<b>Neural Tissue</b>
Describe the anatomical and functional divisions of nervous system
Describe the structure, location and function of different types of neurons and neuroglial cells
Understand the sequence of events that lead to generation of an action potential
Explain the structure of two types of synapses and mechanism involved in synaptic transmission
Describe major types of neurotransmitters and neuromodulators and their effect on neurons
<b>Spinal cord, spinal nerves and spinal reflexes</b>
Describe the gross anatomy and overall function of the spinal cord and meninges
Know the internal organization and function of the spinal cord
Describe the major components and function of spinal nerves: number, branches and major plexuses
Know the functions of reflexes and describe a reflex arc
Understand the major clinical disorders and injuries of the spinal cords and spinal nerves
<b>Brain &amp; Cranial Nerves</b>
Describe the anatomy and function of the major parts of the adult human brain and its protective layers
Describe the formation, circulation, reabsorption and functions of the cerebrospinal fluid.
Describe the location and function of 5 cerebral lobes, and the sensory and motor areas of the cerebral cortex.
List and identify the 12 cranial nerves by name and number and describe their function/s.
<b>Neural integration (Somatic)</b>
Explain the classification of receptors based on location, type of stimuli, speed of adaptation, etc.
Identify the receptors for the general senses, and describe how they function
Understand the integrative functions of the human brain, e.g. sleep and memory
<b>Neural Integration (ANS)</b>
Compare the structure, functions, divisions of the ANS and their neurotransmitters
Understand the significance of dual innervations and autonomic tone
<b>Special senses</b>

Describe the anatomy of the olfactory region and understand the physiology of olfaction
Describe the anatomy of the gustatory region and understand the physiology of gustation
Explain the anatomy and function of the eye, its parts, and its accessory structures
Identify the cellular components of retina and know the transmission pathway for visual sense.
Discuss the common disorders of the visual sense
Explain the anatomy and function of the ear and its parts
Discuss the physiology of hearing and the role of ear in maintaining equilibrium.
Know the clinical disorders associated with the ear.

- 1) Consistently able to demonstrate part to function relationship and the interaction of the circulatory, lymphatic and immune systems without the instructor's help.
- 2) Consistently able to demonstrate understanding and application of hormonal control on homeostasis without the instructor's help.
- 3) Consistently able to demonstrate part to function relationship and the interaction of the respiratory/urinary systems with the cardiovascular system without the instructor's help.
- 4) Consistently able to demonstrate part to function relationship involving the digestive system and its correlation with metabolism without the instructor's help.
- 5) Consistently able to demonstrate interactions of parts to functions involving the reproductive system without the instructor's help.
- 6) Consistently prepared and always able to demonstrate skills using the body system models and laboratory techniques at the classroom standard.
- 7) Consistently uses online tools to prepare for class, always ready for classroom discussions and instructor's Q&A sessions, completes all online quizzes prior to due dates.

- 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.

## **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:

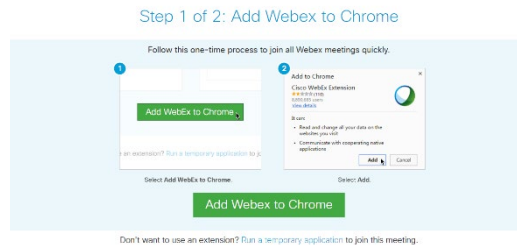
- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as 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:

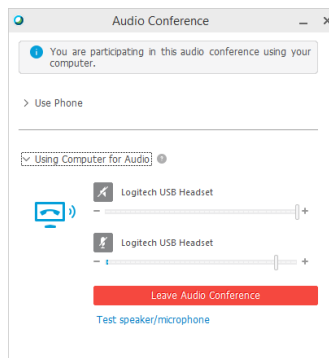
- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](#)

## Using Cisco WebEx for Virtual Meetings and Office Hours

1. Then, click the **Virtual Meetings** tab. You will see a list of available meetings to join. Simply click the **JOIN** button for the meeting you wish to participate in.



2. If this is your first time using Webex, you will be prompted to install a browser extension.
3. You will be prompted to join the audio conference via phone or your computer.
  - 
  - If you want to use your computer, select **Use Computer for Audio**. Once you have selected "Using Computer for Audio," you can either test your speaker/microphone settings or choose to "Call Using Computer".
  - If you are not able to get the computer audio to work, you may join the audio conference by phone. Under the "Use Phone" section, there will be a phone number, access code, and attendee ID. Call the phone number, then enter the code and attendee ID when



prompted.

### Office Hours

1. Click on the **Cisco Webex** button.
2. Then, click the **Office Hours** tab. You will see a list of available time slots in 15 minute increments. If you need more than 15 mins, simply select more than one slot.
3. Scroll to the bottom of the page and click **Confirm Meeting**.
4. To join the scheduled Office Hour Meeting, check your school email and click on the **Join Meeting Link**.

### Additional Troubleshooting and Support Links

- [View a Test Meeting](#)

- [Download Webex Desktop Application](#)  
Here's a quick overview of Webex Meetings App:
- Download Webex client for Mozilla Firefox or Google Chrome
  - To Manually Install Cisco Webex for Google Chrome, see: [Manually Install Cisco Webex for Google Chrome](#)
  - To Manually Install Cisco Webex for Mozilla Firefox, see: [Manually Install Cisco Webex for Mozilla Firefox](#)
- Download Webex Mobile App (The Webex Mobile App does not work with Webex Training Center.)
  - Installer for Apple iOS: <https://itunes.apple.com/us/app/cisco-webex-meetings/id298844386?mt=8>

Installer for

Android: <https://play.google.com/store/apps/details?id=com.cisco.webex.meetings&hl=en>

## Assignments, Exams, and Activities

### Exams

1. Be sure to save exam dates on your personal calendars. There are time limits for exams. You will not be given extended time for testing if you log in late.
2. These exams are closed book; you may not consult with another person while taking this exam.
3. You may not use any other device during the exam; only the one on which you are taking the exam.
4. You must always remain within the Webcam's view with no music or a TV playing.
5. You will be prompted to show your entire exam environment with your Webcam (including your desktop!).
6. Do not look down on your desk or to the side. Always keep your eyes on the computer screen or upwards.
7. **Lecture exams Format:** Will include multiple choice questions, fill in the blank, and short answer questions. You may have questions from the lectures, notes, videos and textbook.
8. **Lecture exams:** Five lecture exams, each covering material from the respective chapters.

### In-Class Activities

- Modules are broken up in to three areas:
  - 1) To Learn
  - 2) To Practice
  - 3) For Grade
- You are expected and required to do everything in the Modules in sequence to unlock the subsequent Modules.
- Watch for the due dates and **the view or mark done** hints in the Module.
- In the Modules, some pages you just have to **view** while others say **mark done (HW, Adaptive Practice and Quizzes)**. The **adaptive practice** assignments are included and worth 10% of your overall grade. You will begin by taking a diagnostic first which ranges anywhere from 19-30 questions. Once you finish that you are not done. Go back to the dashboard to answer additional practice questions to reach a minimum of 40 questions for credit. The **practice quizzes** will account for 10% extra credit to your overall grade, but it is not mandatory. It is included to help you master the content.

### Final Exam

All students will be required to take a comprehensive departmental final exam consisting of 50 multiple-choice questions. The final exam grade will count as 10% of your course grade.



**Students who are absent from the final exam without discussing their absence with the instructor in advance or within 24 hours afterward will receive a course grade of FX.**

### Grading Formula

Lecture Exams.....	50%
Quizzes.....	20%
Adaptive Practice .....	10%
Homework.....	10%
Comprehensive District Final Exam.....	10%
Practice Quizzes (Extra Credit).....	10%
Total.....	110%

The grading scale will be the HCCS standard:

90-100%	A: 4 points per semester hour
80-89%	B: 3 points per semester hour
70-79%	C: 2 points per semester hour
60-69%	D: 1 point per semester hour
0-59%	F: 0 points per semester hour
FX	Earned by excessive absences
Withdrawals and incompletes earn 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," "COM" and "I" do not affect GPA.

**HCC Grading Scale can be found on this site under Academic Information:**

<http://www.hccs.edu/resources-for/current-students/student-handbook/>

### 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, you should drop yourself from the course, or you will likely earn an "F." An incomplete "I" grade will be given only if all of 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 **April 15, 2021**
- ✓ 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

Week	Chapters	Topics to be Covered & HW/Adaptive Practice/Quizzes Due Fridays
1. 2/16-21	1	Overview of Syllabus and Start Here Module  <b>Due:</b> Mandatory LockDown Browser Test & Introduction: Meet & Greet (Feb. 19) & Syllabus Quiz (Feb. 25) ***If not done you will be dropped from course  Introduction to Anatomy and Physiology DUE: HW, AP, EC, and Quiz Chap 1. (2/19)
2. 2/22-28	2, 3	Chemical level of organization  Cellular level of organization  DUE: Syllabus Quiz (2/25), HW, AP, EC, and Quiz Chap 2 & 3 (2/26)
3. 3/1-7	4, 5	Tissue level of organization  Integumentary system  DUE: HW, AP, EC, & Quiz Chap 4 & 5 (3/5) <b>Exam 1:</b> Chapters 1-5 (Mar. 7)
4. 3/8-14	6, 7	Skeletal system: Bone tissue  Axial Skeleton  DUE: HW, AP, EC, Quiz Chap 6 & 7 (3/12)
<b>3/15-21</b>		<b>SPRING BREAK</b>
5. 3/22-28	8, 9	Appendicular Skeleton  Joints  DUE: HW, AP, EC, Quiz Chap 8 & 9 (3/26) <b>Exam 2:</b> Chapters 6-9 or <b>Mid-Term:</b> Chapters 1- 9 (Mar. 28)
6. 3/29-4/4	10	Muscle Tissue DUE: HW, AP, EC, Quiz Chap 10 (4/2)
7. 4/5-11	11	Muscular system DUE: HW, AP, EC, Quiz Chap 11 (4/9)
8. 4/12-18	12	Nervous tissue DUE: HW, AP, EC, Quiz Chap 12 (4/16)
9. 4/19-25	13	Spinal cord and spinal nerves DUE: HW, AP, EC, Quiz Chap 13 (4/23) <b>Exam 3:</b> Chapters 10-13 (Apr. 25)
10. 4/26-5/2	14	Brain and cranial Nerves DUE: HW, AP, EC, Quiz Chap 14 (4/30)
11. 5/3-9	15, 16, 17	Autonomic Nervous System  Sensory Motor and Integrative Systems  Special Senses  DUE: HW, AP, EC, Quiz Chap 15, 16 & 17 (5/7) <b>Exam 4:</b> Chapters 14-17 (5/9)
12. 5/10/21	3:00-4:50 pm	<b>Departmental Comprehensive FINAL EXAM</b>

### 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

**No Make-up on Lecture Exams**  
**No Make-up on graded assessments**

It takes discipline and diligence to succeed in an intensive course such as Biology. DO NOT wait until last minute before you do your assignments. Procrastination is a thief of progress. Do not allow it to steal your grades.

**It is your responsibility to contact me if you are ill, having technical difficulty etc. Same day notices when the assignment is due will not be accepted.**

\*\*In some extreme instances (e.g., medically excused absence, death in immediate family with documented proof) a make-up lab exam will be administered and may take either oral or written essay format. All make-up examinations will have a maximum score of 90% (reduced by 10%) regardless of whether there was a valid reason for missing the scheduled examination. Remember, typically, there will be no make-up exams.

Doctors note will not be after one week of the missed assignment/exam.

## Academic Integrity

Academic dishonesty: Academic dishonesty will result in disciplinary action, including dismissal. If cheating is discovered during assessments an "F" with zero points will be administered for the exam/quiz/homework/lab grade. If this should become a persistent problem, the student will receive an "F" for the course. Please be aware that it is VERY difficult to pass the course with a zero-point exam score. Please see page 78 of the Student Handbook for more details.

<https://www.hccs.edu/resources-for/current-students/student-handbook/#d.en.293830>

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

Attendance is mandated by the state. It is important that you log on daily to class! Attending class regularly is the best way to succeed in this class. Although it is your responsibility to drop a course for non-attendance, **a student who misses four or more classes is subject to administrative withdrawal.**

**Attendance will be recorded at the beginning of each class period or in the case of online class, on the official day of record.** For the online course attendance, the Start Here Module Assignments must be completed. If the Start Here Module assignments are not complete and you are marked absent, the registrar office may drop you from the course and you will not be added back in to the course. Absence from class does not excuse a student from class work or exams missed. Students are responsible for information missed due to absence.

Get the contact information of at least two students, preferably three, in class. If you are absent, it is your responsibility to contact one these students to inform you about what was covered in lecture. I will not supply missed notes.

If you stop attending class for whatever reason, **it is your responsibility to officially drop the course by April 15, 2021. Otherwise you will receive an "FX" for the course.**

Absences are excused in cases of illness verified by a physician, the death of an immediate family member or a problem verified by a police report or court order.

### **Student Conduct**

Appropriate student conduct is always expected. Disruptive behavior will result in Security. Please see page 78 of the Student Handbook for more details.

<https://www.hccs.edu/resources-for/current-students/student-handbook/#d.en.293830>

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

If you are struggling in this course and considering dropping, please schedule a Cisco WebEx Hours conference to discuss your class standing and have a counseling session with me first and also schedule a meeting with your academic advisor.

### **Electronic Devices**

Electronic devices not to be used during class without my permission. Please excuse yourself from the classroom if you must answer a call so your will not disturb your peers learning.

### **Additional Support and Encouragement**

**Please make sure that if you have any questions or problems at any time, that you first contact me as soon as possible.** The worst thing you can do is wait to contact me or to not take advantage of the resources available to you. By taking an active part in your education, you will make your academic experience much more rewarding and exciting!!

- **Withdrawing:** I urge any student who is contemplating withdrawing from the class to see me first! You may be doing better than you think. Either way, I want to be accessible and supportive. I do not believe in "weed out" classes, and I consider you to be much more than just a name or number! If you need assistance, I am here to help.

It is the student's responsibility to withdraw from the class before the last day of withdrawal. The instructor cannot give a "W" after the withdrawal date. Abandoning the course or failing to formally drop, will result in a grade being given based on the work completed for the entire course (including missed exams).

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor will "alert" you that you might fail a class because of excessive absences and/or poor academic performance. The counselors will work with you to learn about what, if any, HCC interventions might be available to assist you – online tutoring, childcare, financial aid, job placement, etc. – to stay in class and improve your academic performance.

- **Studying:** How should you study for this course?

- ✓ Go over your lecture notes after each lecture/lab, while the material is still fresh on your mind.
  - ✓ Although some memorization is invariably necessary when learning a new "language", the goal of learning is to understand the information, not to simply memorize a bunch of disconnected "facts". A major purpose of studying is to discover what you do not understand so that you can do something about it.
  - ✓ Do not just passively read the notes, think about them and ask yourself questions about them. Do you understand what was said? Does it make sense and why? Compare and contrast the new information with things that you have already learned.
  - ✓ Form study groups, these are very helpful for the learning process.
  - ✓ Keep up regularly. You cannot cram all the information into your brain the night before an exam, and we may not be available to answer your questions at the last minute. For this upper division lecture and laboratory course – you should plan to **spend at least 6 hours per week OUTSIDE of class studying for this course.**
- **Taking notes:**
    - ✓ Attending class regularly and keeping good notes is essential for success in this course. Good notetaking is an acquired skill. Do not try to write full sentences – you will be so busy writing that you may miss the next point and your notes will be harder to study.
    - ✓ Instead of writing down every word during lecture, write down key phrases and use short abbreviations.

Cornell Notes are a valuable proven to take notes and learn from your notes. Please see the following video on how to correctly take Cornell Notes: <https://www.teachertube.com/video/cornell-notes-for-students-avid-302936>

### **Technical Support for Students**

It is your responsibility to possess the necessary skills to manage the hardware and software systems for this course. In addition, if your normal computer becomes unavailable for any reason, you are responsible for locating and operating other adequate computer facilities to meet the course deadlines.

**If you have any technical problems, please contact the Canvas Helpdesk or Pearson Helpdesk, and get a service ticket and email me the Service Ticket number that they email you when you contact me with details of the problem. Please do not contact me first as I am not an IT technician.**

### **Alternative Methods of Turning in Assignments**

Even if your computer crashes, you are still responsible for meeting the course deadlines. Each campus has computer labs available for students. Houston Community College is

comprised of 6 regions with several campus locations per region. Each campus provides computer labs for education support. Computer labs are generally located at each campus library.

*If necessary, you can request permission from me to turn in an assignment in an alternative method. Email or Inbox me to request special permission.*

## **Eagle Online Help Center and Canvas Help**

HCC Online publishes the [Eagle Online \(Canvas\) Technical Requirements for HCC Students. Links to an external site.](#)

You can find the answers to many of your questions about how to use Canvas by clicking the **Help** link in the bottom left corner of the Canvas window and then clicking **Search the Canvas Guides**.

If you have technical issues with Canvas, click the **Help** link and then click **HCC Online Help**.

Eagle Online Help Center: <https://www.hccs.edu/online/technical-support/Links to an external site.>

Eagle Online Technical Support 713-718-5275, option 3

IT Help Desk 713-718-8800, option 1(**Password reset**)

## **LockDown Browser Requirement**

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be the type that is built into your computer or one that plugs in with a USB cable.

1. You will need a computer where you have the capability to download the software yourself. iPads are fine but **Chromebook cannot be used with Lockdown browser**.
2. You will need an internal computer camera or an attached external camera. Please also ensure that your computer has no technical or networking problems.
3. Use the following link to watch a short video to get a basic understanding of LockDown Browser and the webcam feature. Then download and install Lockdown Browser from the link:

[Respondus Lockdown Browser and Monitor with Installation Instructions](#)

**Download and install LockDown Browser from this link:**

<https://download.respondus.com/lockdown/download.php?id=355612798>

### **Once Installed**

- Start LockDown Browser
- Log into to Canvas
- Navigate to the quiz

Note: You won't be able to access a quiz that requires LockDown Browser with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

4. Take the **MANDATORY** quiz titled "**Practice Test**".

This practice run will help prepare you for using Lockdown Browser + Webcam before you take the actual exams. You can find this quiz at the end of this "Start Here" Module

For additional details on using Lockdown Browser, review the Student [Quick Start Guide \(PDF\) \(Links to an external site.\)](#)[Links to an external site.](#) [\(Links to an external site.\)](#)

If you have any issues the first time you use Lockdown/webcam, HCC online tech support should be able to resolve this for you. **Please note:** It is best for you to call them directly as technical difficulties are very specific and they want to talk to you so they can walk you through the trouble- shooting options. The number to call is **713 718 5275-option 3**.

## Guidelines

When taking an online quiz, follow these guidelines:

1. You **need to commit a period** for the exam with no interruptions at that time. Please allow adequate time to complete the exam, in addition to resolving any unanticipated personal computer or networking problems.
2. You are required to show your **Photo ID** at the start of **Every** exam.
3. When prompted, show your **ENTIRE 360 Exam Environment** with your Webcam. This includes the surface (desk) your device is on and floor underneath. If you have a mounted monitor, please use a **mirror** to show your entire exam environment.
4. Prior to starting the Exam, save all opened work on the computer, close all apps, complete all computer software updates, and restart your computer. If not, your computer may lock up during the exam.
5. Please turn off all other electronics other than your laptop (as well as little brothers gaming), as they decrease your Wi-Fi bandwidth and may cause issues with Lockdown Browser.
6. Please use the restroom before taking this exam. **You will not be able to exit once you start the exam.**
7. You will have only **One Attempt** to complete the exam.
  - o What it means is that once you start the test, you must finish and SUBMIT it before logging out. You will NOT be allowed to log in the second time to take the same test.
8. Please **Do Not speak or Use Headphones** during the exam.
9. Avoid wearing baseball caps or hats that extend beyond the forehead
10. **Focus only on the screen** and not on your surroundings (so no looking up, down or sideways!). You are not allowed to turn away from the computer or leave. **Your complete face must always remain within the Webcam's view.**



11. You may not use any other device/notes/or any kind of aid during the exam.
12. Avoid back-lighting situations, such as sitting with your back to a window. The general rule is to have light in front of your face, not behind your head.
13. Do not lie down on a couch or bed while taking an exam. There is a greater chance you will move out of the video frame or change your relative position to the webcam.
14. Do not take an exam in a dark room. If the details of your face don't show clearly during the webcam check, the automated video analysis is more likely to flag you as missing.
15. If the automatic alerting system notifies me frequently your grade **maybe lowered** for not following the above directions!!!
16. No copying/downloading exam pictures or any part of the exam.

If the above Instructions are not followed, you may receive a score of zero for the exam and it will not be able to be used as your drop exam. Further, you may receive a zero for the course. In addition, a **Maxient Student Conduct report** will be submitted to the HCC office. Repeat offenders may receive disciplinary action including expulsion from the college

Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

### **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/>

## HCC Policies

Here's the link to the HCC Student Handbook <http://www.hccs.edu/resources-for/current-students/student-handbook/> 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:

<http://www.hccs.edu/departments/police/campus-carry/>

### 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 (<http://www.hccs.edu/departments/institutional-equity/>)

### **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 <http://www.hccs.edu/support-services/disability-services/>

### **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 [Institutional.Equity@hccs.edu](mailto:Institutional.Equity@hccs.edu)  
<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/student-complaints/speak-with-the-dean-of-students/>

## **Department Chair Contact Information**

Dr. DaeJan Grigsby

Email: [daejan.grigsby@hccs.edu](mailto:daejan.grigsby@hccs.edu)

Phone: 713-718-7775

### **Important Academic Dates**

Feb. 01, 2021 – Official Day of Record/Last Day to Opt-Out of Inclusive Access

Feb 12 – Last Day for 100% Refund

Feb. 25 – Official Day of Record

Mar. 01 – Last Day for 70% Refund

Mar. 04 – Last Day for 25% Refund

Apr. 15 – Last Day to Withdraw

May 09 – Last Day of Instruction

May 10 – 16: Final Exam Week