



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

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

**BIOL. 2302: Anatomy and Physiology 2 | Lecture |
16705 and 22759**

Spring 2021 | 12 Weeks (2.15.2021-5.16.2021)

Online Anytime

3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Renu Jain, Ph.D

Office Phone: 713-718-2537

Office: Virtual via WebEx

Office Hours: Virtual by Appointment

HCC Email: renu.jain@hccs.edu

Office Location: Online

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

HCC Email: renu.jain@hccs.edu. HCC Office phone no. 713-718-2537 (please leave a message if I am not at my desk).

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? 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. 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.

You will use what you learn in this course; in your own personal life as well as in your chosen 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 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.

nextLearning

Online Anytime – Students can take classes online and complete the course requirements at their pace meeting all course deadlines. Students never come to campus, but log into their class and complete the requirements using our learning management system (Canvas).

Prerequisites 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

As an online 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.

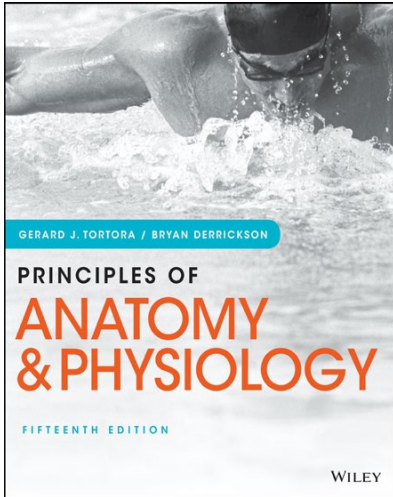
Scoring Rubrics, Sample Assignments, etc.

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

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**). Students who withdraw prior to the official day of record will have their course materials fee refunded within two day - 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.

The bookstore may stock a low-cost loose-leaf version of the textbook or help you place an order for the low-cost printed text option. The low cost printed text is only available for students participating in the First Day program

For more information and FAQs go to customer care.bncollege.com.

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 [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

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.

Program Student Learning Outcomes (PSLOs)

- Will display an understanding of biological systems and evolutionary processes spanning all ranges of biological complexity, including atoms, molecules, genes, cells, and organisms.
- 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).
- Will demonstrate proficiency and safe practices in the use of laboratory equipment and basic laboratory techniques.
- 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

- Consistently able to demonstrate part to function relationship and the interaction of the circulatory, lymphatic and immune systems without the instructor's help.
- Consistently able to demonstrate understanding and application of hormonal control on homeostasis without the instructor's help.
- 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.
- Consistently able to demonstrate part to function relationship involving the digestive system and its correlation with metabolism without the instructor's help.
- Consistently able to demonstrate interactions of parts to functions involving the reproductive system without the instructor's help.
- Consistently prepared and always able to demonstrate skills using the body system models and laboratory techniques at the classroom standard.
- 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.

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. 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

As a student, it is your responsibility to:

- Attend class 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

Assignments, Exams, and Activities

- **Graded Assignments:** All deadlines for the graded assignments are in the syllabus and must be completed in a timely manner.
 - **Syllabus Quiz (1% of the total grade):** This quiz goes over the details of the course syllabus and is due by the attendance approval deadline.
 - **Adaptive Practice Assignments (10% of the total Grade – online submission):** Adaptive online assessments. These assignments are meant to help you understand chapter content. You have to complete a minimum of 40 questions/chapter to receive a grade for this assessment, therefore attempt additional practice questions to reach your target of 40 questions.
 - **Chapter Quizzes (10% of the total Grade – online submission)** After the chapter/s are covered in lecture, you will be given an online quiz to master the course content. These quizzes are open book and timed.
 - **Lecture exams (69% of the total Grade):** There will be a total of four lecture exams. Questions will be primarily multiple choice, along with some true or false, fill in the blank, picture identification, and short essay questions. Each exam has equal weight-age with other exams (100 pts each). All lecture exams will be online using the Respondus Lockdown Browser and webcam (departmental policy). Please ensure you have a computer with camera where the software can be downloaded.
 - **Final Exam (10% of the course):** is mandatory for all students. This is a comprehensive final exam including all chapters covered in the course and is a requirement of the Biology Discipline at HCC. Final exam will be administered ONLINE using the Respondus Lockdown Browser and Webcam.

Grading Formula

Lecture Exams (Lowest grade dropped)	69%	HCC Grading Scale 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 W(Withdrawn).....0 points per semester hour I (Incomplete).....0 points per semester hour AUD (Audit)0 points per semester hour 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.
Chapter Quizzes	10%	
Adaptive Practice Assignment	10%	
Final Exam	10%	
Syllabus Quiz	1%	
Total Score	100%	

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 **December 1, 2020**
- ✓ 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		Reading Schedule	Testing Schedule
2/16	18	Orientation, Endocrine System	Adaptive Practice (#18) Feb 20 midnight,
2/22	19	The Cardiovascular System – Blood	Adaptive Practice (#19) Feb 24 midnight Syllabus Quiz- due by Feb 25 at 5 pm
3/1	20	The Cardiovascular System – Heart	Adaptive Practice (#20) March 1 midnight March 5: Quizzes, Chapter 18-20 March 6: EXAM 1 – ONLINE
3/8	21 22	The Cardiovascular System – Vessels & Circulation Lymphatic System and Immunity	Adaptive Practice (#21) March 8 midnight Adaptive Practice (#22) March 12 midnight
3/15		SPRING BREAK	
3/22	23	Respiratory System	Adaptive Practice (#23) – March 22 midnight March 26: Quizzes, Chapter 21-23 March 27: EXAM 2 – ONLINE
3/29	24	Digestive System	Adaptive Practice (#24) – March 30 midnight
4/5	25	Metabolism and Nutrition	Adaptive Practice (#25) – April 5 midnight
4/12	26	Urinary System	Adaptive Practice (#26) – April 12 midnight April 15 – Withdrawal Deadline April 16- Quizzes, Chapter 24-26 April 17- EXAM 3 – ONLINE
4/19	27	Fluid, Electrolytes and Acid-Base Balance	Adaptive Practice (#27)– April 21st midnight
4/25	28	Reproductive System	Adaptive Practice (#28)– April 27th midnight
5/3	29	Development, Pregnancy and Heredity	Adaptive Practice (#29)– May 3rd midnight May 9: Quizzes, Chapter 27-29
5/10			May 10: Exam 4 CH 27-29 May 11: FINAL EXAM-ONLINE COMPREHENSIVE

Important Dates:	
Feb 15	Last Day for drop/add
February 25	Official Day of Record (attendance Approval Deadline)
April 15 before 4:30 pm	Last Day for Administrative and Student Withdrawal
May 16	Grades available to students

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

- The Instructor DOES NOT have to announce/tell you of upcoming assignments in person. This is a college course and you have to keep yourself informed by keeping up with your canvas. All assignments and quizzes will be posted with dates and the dates will be updated as the semester goes on. It is your responsibility to keep up.
- A grade of ZERO will be awarded for any missed work or test without proper documentation of a health emergency. A make up is NOT a retake of the same exam. There is no repeating of examinations or "dropping" of lowest grade/s. The Instructor must be given advance notice of absence.

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. Additional sanctions including being withdrawn from the course, program or expelled from school may be imposed on a students who violate the standards of academic integrity.

Scholastic Dishonesty will result in a referral to the Dean of Student Services. 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

Attendance is mandated by the state. You are expected to attend the entirety of the scheduled lecture and lab classes. 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. 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.

- 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.
- Students who stopped attending class: The Department of Education now requires that we make a distinction between an "earned" grade of "F" (i.e. for poor performance) and a grade of "F" due to a lack of attendance. To make that distinction, we have created a new grade, "FX" for failure due to lack of attendance. Faculty will not be allowed the option of submitting a grade change form changing the grade of FX (or F) to W, if the student stopped attending class. Failure to alert instructor of missed exams and lack of attendance will result in this grade option.

Student Conduct

Students are expected to conduct themselves as adults. This includes courteous and respectful behavior towards instructor and classmates. Disruptive behavior or any behavior that interferes with any educational activity being performed by the instructor will not be allowed. Additionally, no student may interfere with his/her fellow students' right to pursue their academic goals to the fullest in an atmosphere appropriate to a community of scholars. Disruptive behavior may result in removal from the class.

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

EGLS³

The EGLS³ (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. EGLS³ 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
<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

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