



**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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**BIOL 1106: General Biology | Laboratory | #10944**

Summer I 2020 | 5 Weeks | Online - D.E.

Cisco WebEx | Monday & Wednesday 8 a.m.-9:00 a.m. for Questions

1 Credit Hours | 48 hours per semester

**Instructor Contact Information**

Instructor:	Donald Parker, M.D.	Office Phone:	713-718-6127 (VM not ck)
Office:	Suite 215 Cubicle 222.12	Office Hours:	M-Th 11:00 a.m.-12:00 p.m.
HCC Email:	Via Canvas Inbox only!!! (per HCC policy or no reply)	Office Location:	Central, San Jacinto Building

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 contact me via **Canvas Inbox** email, as it is my preferred method of communication. Also, my school email is [donald.parker@hccs.edu](mailto:donald.parker@hccs.edu) if needed. I will only respond if you use your school email when communicating with me. In your profile, please correct your email address and notification alerts. I cannot respond to your personal email address per HCC policy. Typically, 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 Biology through hands on laboratory experiments. You may even enjoy the lab component more than the lecture because it is hands on and will help in the understanding of key topics in Biology. Like scientists in research labs all over the world, you will follow the scientific method, design experiments and work as a team. You will learn to record your observations in the written lab reports. How useful is the microscope in viewing cells? Why do we need to stain cells? How are plant cells different from animal cells? How do cells divide and why? You will learn methods to find biological molecules in different foods, separate

pigments from plants, isolate and separate DNA. In this lab course you will also learn how we inherit traits from our parents and will be able to do various genetics problems.

## **My Personal Welcome**

Welcome to General Biology I Lab—I'm delighted that you have chosen this course! One of my passions is to know as much as I can about living organisms, and I can hardly wait to pass that on to you. 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 via Canvas 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 yourself and of human life. So please visit me or contact me by email whenever you have a question.

## **Prerequisites and/or Co-Requisites**

Recommended prerequisite: MATH 1314 or 1414 Successful completion of College Algebra or concurrent enrollment in higher-level mathematics is recommended.

Pre/Co-requisite: BIOL 1306 Biology for Science Majors I (lecture). If you have enrolled in this course having satisfied these pre/co requisites, you have a higher chance of success than students who have not done so.

Please carefully read the repeater policy in the [HCCS Student Handbook](#).

## **Canvas Learning Management System**

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

## **Open Lab Locations**

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

## **HCC Online Information and Policies**

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

**In our efforts to prepare students for a changing world, students may be expected to utilize computer technology while enrolled in classes, certificate, and/or degree programs. The specific requirements are listed below:**

1. You will need a laptop or access to a laptop with webcam that is not a Chrome Book every class. Chrome Book does not work with LockDown Browser which you will have to download to take exams in this course.
2. Download Lock Down Browser by the completion of the first day of class. Directions and link below.
3. Access Canvas for assignments, PowerPoints, lecture notes, MasteringBiology textbook online assignments, quizzes, and exams.

### **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.

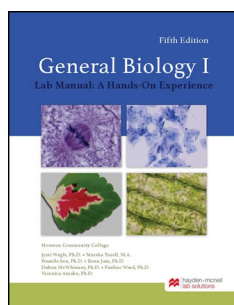
<https://eagleonline.hccs.edu/login/ldap>

# Instructional Materials

## Required Resources

The textbook listed below is required for this course.

**Do not purchase a book or access code for this course.** You have already paid for your course materials through the registration process. 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. Your course materials for this class will be accessed digitally through this Canvas site. **NO** other purchase is necessary. For students who wish to have a printed copy of the text, an optional low-cost print copy is available for purchase at the **Houston Community College Bookstore at Central Campus**. You have the right to opt-out and purchase your own course materials if you desire, prior to the official day of record, which is **June 11, 2020 for Summer I 2020**. It is NOT recommended that you Opt-Out, as these materials are required to complete the course. 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.



**Biology 1106 Lab. Manual: Used at Central, Coleman and Southeast**

BIOL 1106: General Biology I Lab Manual: A Hands-On Experience, 5th Edition, 2019, Editors Dr. Jyoti Wagle & Ms. Marsha Turell, Hayden-McNeil Publishers, ISBN 978-1-5339-1885-7

The laboratory manual can be found at the [HCC Bookstore](#). Order your laboratory manual here: [HCC Bookstore](#)

## Suggested Resources



**HCCS Biology Lab Study Pages**

[Click here to access Biology lab study pages online.](#)

**OER: OpenStax (Free eText):**

<https://openstax.org/details/books/biology-2e>

**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>

A **Laptop** with webcam is required for my course (**Not a ChromeBook**)

**LockDown Browser + Webcam Requirement** (For exams 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](https://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**

### **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 1106 laboratory-based course accompanies BIOL 1306 Biology for Science Majors I. Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included.

**\*\*\* Use ACGM course description per course.**

### Core Curriculum Objectives (CCOs)

BIOL 1106 satisfies the Natural 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 complete the required experiments, draw conclusions, record results in the form of graphs, tables in the laboratory manual, completing pre-lab and post-lab assignments, and answer questions on quizzes and exams that pertain to Course Student Learning Outcome #1 below.
- **Social Responsibility:** Students will demonstrate the ability to engage effectively in conducting laboratory experiments as a team, complete the conclusion and results as a follow up discussion, complete laboratory pre-lab and post-lab assignments, and answer questions on quizzes and exams that pertain to Course Student Learning Outcome #2 below.

### Program Student Learning Outcomes (PSLOs)

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

### Course Student Learning Outcomes (CSLOs)

#### Upon successful completion of BIOL 1106, students will:

1. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory. Communicate effectively the results of scientific investigations.
3. Explain the methods of inquiry used by scientist.
4. Identify the basic properties of substances needed for life.
5. Compare and contrast the structures, reproduction, and characteristics of prokaryotic cells, and eukaryotic cells.
6. Describe the structure of cell membranes and the movement of molecules across a membrane. Identify the substrates, products, and important chemical pathways in metabolism.
7. Identify the principles of inheritance and solve classical genetic problems.

8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.

## Learning Objectives

Learning Objectives for each CSLO can be found at [Learning Objectives for BIOL 1306](#)

### EX #1: Lab Safety & Procedures

- Learn about, then demonstrate mastery lab safety and regulations.
- Learn about, then demonstrate lab procedures and use of lab equipment.

### EX #2: Scientific Method

- Learn about, then demonstrate the process of the scientific method.
- Learn about, then demonstrate its role in scientific investigation.
- Learn then demonstrate how to plot a graph.

### EX #3: Measurements

- Learn to measure length, volume, mass, and temperature.
- Learn to make percent solutions
- Learn to convert units of measurements

### EX #4: Basic Chemistry

- Understand the organization of the periodic table.
- Understand basic atomic structure.
- Know isotopes and their applications.
- Know the different types of chemical bonds.

### EX #5: Water & Its Properties

- Learn about the structure of a water molecule.
- Understand the properties of water.
- Understand pH and buffers.

### EX #6: Biomolecules

- Understand the chemical structure and characteristics of biomolecules.
- Use test reagents to detect the presence of carbohydrates and proteins in samples.
- Understand the chemical structure and properties of lipids.
- Study the structure of nucleic acid.

### EX #7: The Microscope

- Study of applications of different types of microscopes.
- Know the parts of a bright-field compound microscope and their functions
- Learn to use and take care of the microscope.

### EX #8: Cell Structure & Function

- Understand the basic structure and function of prokaryotic and eukaryotic cells.
- Learn to prepare a wet mount and stain specimens.
- Understand the similarities and differences between plants and animal cells.

### EX #9: Diffusion & Osmosis

- Understand the structure and function of plasma membrane.



- Study the diffusion and osmosis processes.
- Observe the effects of varying solute concentrations on plant cells.

#### EX #10: Enzymes: Catalysts of Life

- Understand how an enzyme works.
- Learn to prepare an enzyme extract and serial dilutions.
- Study the factors that affect enzyme activity.

#### EX #11: Cellular Respiration & Fermentation

- Understand aerobic vs anaerobic respiration.
- Demonstrate aerobic respiration.
- Demonstrate fermentation in yeast.

#### EX #12: Photosynthesis

- Demonstrate photosynthesis and study the requirement of light in this process.
- Observe stomata and understand their role in gas exchange.
- Extract and separate photosynthetic pigments from the leaves.

#### EX #13: Cell Division – Mitosis

- Understand the structure of chromosomes and their behavior during the cell cycle.
- Identify interphase and stages of mitosis.
- Compare cytokinesis in plant and animal cells.

#### EX #14: Cell Division – Meiosis

- Identify the stages of meiosis.
- Understand the significance of meiosis during gamete formation.

#### EX #15: Mendelian Genetics

- Learn the genetic terminology.
- Understand and apply Mendel's laws of heredity.
- Solve monohybrid and dihybrid crosses.

#### EX #16: Non-Mendelian Genetics & Human Heredity

- Learn about exceptions to the Mendelian principles
- Understand gene linkage.
- Distinguish between autosomal and sex-linked inheritance.

#### EX #17: DNA Extraction, Structure, & Replication

- Understand the structure of DNA
- Understand the mechanism of DNA replication.
- Extract DNA from strawberry cells.

#### EX #18: Gel Electrophoresis

- Discuss the role of restriction enzymes in DNA technology.
- Learn the principles and applications of electrophoresis techniques.
- Learn to load the samples, run the gel and analyze the results of electrophoresis.

## **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.

Refer to the syllabus for the last date. 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! Note my office hours, above; if you need assistance, I'm 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, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

### **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

## Assignments, Exams, and Activities

### Written Assignment

Written Pre-Lab and Lab Report assignments are required. The written assignment(s): Lab Reports will count at least 15% of students' course grades and Pre-Lab Reports will be 5% of students' course grades.

### Exams

**Lab Practicals:** There will be 3 lab exams. They will cover material we cover in the labs and the material in the lab book. They may consist of fill in the blanks, multiple choice, and short answer. You will get a maximum of one hour or one and half-hour period to complete your lab exam depending on the number of questions (usually 50 – 80 questions). **No cell phones are allowed in use at any time in the classroom unless permitted by the instructor as it may disturbs the class. Audible cell phone ringing may result in your removal from class that day. Cell phone use during examination will be considered cheating and will result in course failure. Entering and exiting lecture room is not permitted once exams have begun; therefore, go to the restroom prior to the exam and all personal items must be placed at the front of the room.**

### In-Class Activities

1. You are expected to read your lab experiment prior to coming to lab.
2. You are expected to have completed your pre-lab prior to entering the lab.
3. No late pre-labs will be accepted after the start of lab class.
4. You are expected to work as a group and collaborate in lab so that you are knowledgeable of every part of the lab, as you will be tested on it without a word bank and spelling counts. So pay attention.
5. You are required to complete your lab report that will be grade at the completion of lab or upon returning to the next lab class.
6. You will have a Canvas Quiz on your lab you complete weekly.
7. You must complete 3 lab practicals, 50 – 80 question fill in the blank without a word bank. Spelling Counts, so practice.
8. No Late work accepted for missed labs for absences except with documented excuse/proof (doctor's note, death in immediate family) and it must be turned in after the next Biology Open Lab Review (schedule TBA).
9. There are no make-up lab practicals due to scheduling and time to set up lab practicals. All miss lab practicals will be assigned as a zero.

### Final Exam

**There is no final exam for General Biology I Lab!!!!**

### Extra Credit

There are no special assignments for extra grade points.

## Laboratory Policy

Lab safety will be reviewed on the first day of lab. Experiments will be performed in groups. Each student should arrive at the lab on time, with his or her lab manual. Each student is responsible for completing the lab reports at the end of each lab.

### Grading Formula

#### The HCC grading scale is:

A = 100 – 90: .....	4 points per semester hour
B = 89 – 80: .....	3 points per semester hour
C = 79 – 70: .....	2 points per semester hour
D = 69 – 60: .....	1 point per semester hour
59 and below = F.....	0 points per semester hour
FX (Quit class but not withdrawn) .....	0 points per semester/Student Visa revoked (deportation)
IP (In Progress) .....	0 points per semester hour
W(Withdrawn).....	0 points per semester hour I
(Incomplete).....	0 points per semester hour AUD (Audit)
.....	0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

#### GRADE DETERMINATION:

All the exams will be considered towards final grade.

Lab Exams	70%
Lab Reports/Book	20%
Quizzes	5%
Pre-Lab Reports/Participation	<u>5%</u>
	100%

#### REPEATING COURSES (THREE-PEAT RULE)

As a result of recent Texas legislative changes, please be advised that HCC is charging additional tuition for students who enroll in the same class three or more times at HCC. While it is the hope of HCC that students will be successful in their first attempt at classes, we realize that life demands, academic struggles, and other issues may result in students needing to take the same class more than once.

Speaking with an advisor will help you develop student success skills, improving your overall academic

performance. If a student repeats a course in which a grade (A-F) has been received, the highest grade received at HCC is the permanent grade for the course and will be used in computing the GPA. All grades earned in a given course will be reflected on the transcript. Other colleges may compute the GPA differently than HCC.

#### COURSE WITHDRAWALS (6-Drop Rule)

Students must withdraw by the withdrawal deadline in order to receive a "W" on a transcript. Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online Academic Calendar, any HCC Registration Office, or any HCC advisor to determine class withdrawal deadlines.

Be certain you understand HCC policies about dropping a course and consult with a counselor/advisor to determine if withdrawing is in your best interest. It is your responsibility to withdraw officially from a class and prevent an "F" from appearing on your transcript. Senate Bill 1231 limits the number of W's a student can have to 6 classes over the course of their entire academic career. This policy is effective for students entering higher education for the first time in fall 2007 and subsequent terms. Withdrawals accumulated at any other Texas public higher education institution count toward the 6 course total. Withdrawals for certain circumstances beyond the students control may not be counted toward the 6drop limit. In addition, withdrawing from a course may impact your financial aid award or eligibility. Contact the Financial Aid Office or website to learn more about the impact of withdrawing on financial aid.

### **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% (completed 85% of course work) 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 27, 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

**TENTATIVE INSTRUCTIONAL OUTLINE:** The Instructor reserves the right to change the instructional outline if needed. Students will be informed in a timely manner of any changes.

Week	Lab Assignment and Exams
1	Organization session; Review Lab Review website (hccs.edu/biologylabs); Lab Ex 1: Lab Safety, Procedure Lab Ex 2: Scientific Method Lab Ex 3: Measurements Lab Ex 4: Basic Chemistry
	Lab Ex 5: Water and its Properties
2	Lab Ex 6: Biomolecules, Lab Ex7: The Microscopes <b>Lab Exam 1 (Ex. 1-7)</b> Lab Ex 8: Cell Structure and Function Lab Ex 9: Diffusion and Osmosis
3	Lab Ex 10: Enzymes-Catalysts of Life Lab Ex 11: Cellular Respiration & Fermentation Lab Ex 12: Photosynthesis <b>Lab Exam 2 (Ex. 8-12)</b>
4	Lab Ex 13: Cell Division: Mitosis Lab Ex 14: Cell Division: Meiosis Lab Ex 15: Mendelian Genetics Lab Ex 16: Non-Mendelian Genetics & Human Heredity Lab Ex 17: DNA Extraction, Structure & Replication Lab Ex 18: Gel Electrophoresis
5	Lab Ex 19: Protein Synthesis Presentations/Submission of group projects/Grading of lab manuals <b>Lab Exam 3 (Ex. 13-19)</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

Make-up Lab Practicals/Quizzes: There will be no make-up exams without documentation and laboratory exams are mandatory. In general, there are no lab make-up examinations. 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 and that laboratory exams are mandatory.**

### 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.

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. 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.

**Note that 12.5% is approximately 4 labs for this 1-semester hour course.** If circumstances significantly prevent you from attending classes, please inform me. It is the responsibility of each student to amend their professional/personal schedule to meet the class schedule. If you wish to drop the course, it is **your responsibility** to go online and do it. I usually will not drop students for non-attendance



## Student Conduct

Students are expected to conduct themselves appropriately while on College property or in an online environment. The instructor would institute established HCCS disciplinary action. 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.

**BEHAVIOR AND ETIQUETTE:** Students should be on time for class and be prepared with required materials including textbook and lab manual. All your personal belongings except your pencil, lab manual and textbook should be placed in the back of the room on the bench so your personal effects won't get contaminated. Remember, you never know what the prior classes' lab entailed and if they disinfected the lab bench properly. Full class attendance is required including lecture and lab portions. Full attention during lecture and lab is required. No use of any electronic devices during the class period unless approved by your instructor. Students are expected to conduct themselves as adults. This includes courteous and respectful behavior towards the 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.

**NO EATING OR DRINKING OR SMOKING IN LABORATORY:** No food or drinks are allowed in the laboratory. In addition, no smoking is allowed.

### **DRESS CODE:**

**While in the laboratory you should have the following:**

- Approved safety goggles
- A shirt that covers the stomach and lower back as well as the upper arms
- Long pants (An acceptable, but not recommended, alternative is to wear shorts, a skirt, or a lab coat such that your knees are covered when you are sitting down.)
- Shoes that completely cover the foot.

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**Avoid wearing the following items to lab:**

- **Contact lenses**
- **Tank tops or cropped shirts**
- **Mesh shirts**
- **Shorts or skirts that do not cover your knees when you are sitting**
- **Sandals, flip-flops, or other shoes that do not completely cover your feet. Sandals with socks is not considered appropriate attire.**

**Student Services Policies:** Access up-to-date Student Services Policies on their Web site: <http://www.hccs.edu/resources-for/current-students/student-handbook/>

## Instructor's Course-Specific Information

**INSTRUCTORS' ASSURANCE:** Refer to the syllabus for the last date. 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! Note my office hours, above; if you need assistance, I'm 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, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

**QUESTIONS/PROBLEMS:** 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!!!

### **Electronic Devices**

**IN CLASS TECHNOLOGY (Cell Phones, Laptops, etc.)** Absolutely no phone or other personal electronic devices are to be used during class (lecture and lab). This includes making or taking a call, reviewing messages, texting, playing games, checking email, surfing the web, anything that involves a phone or other personal electronic device like your smart watch, etc. If your work or family situation requires that you be available via phone, your phone can be on vibrate mode and you can take the call during our regular scheduled breaks or you can 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. The taking of calls during class is not only disruptive but it is also discourteous to classmates and the instructor. If you would like to record my lecture, you must ask prior to recording each lecture!!!

### **HCCS IS COMMITTED TO YOUR SUCCESS**

#### **Early Intervention Program and Services**

Your success is our primary concern! If you are experiencing challenges achieving your academic goals, please contact your instructor or an early intervention coach. We can provide assistance with academic needs, ADA accommodations, classroom difficulties, financial concerns, and other issues.

#### **Tutoring**

HCCS provides free online and on campus tutoring for all HCC students. Go to <https://hccs.upswing.io/>

#### **Counseling Services**

Counseling services are available to students who are experiencing difficulty with academic issues, selection of college major, career planning, disability accommodations, or personal issues. <http://learning.hccs.edu/programs/counseling>

### **Accommodations due to a qualified disability**

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

### **AMERICANS WITH DISABILITIES ACT STATEMENT**

HCCS is dedicated to providing the least restrictive environment for all students. We promote equity in academic access through the implementation of reasonable accommodations as required by the Vocational Rehabilitation Act of 1973, Title V, Section 504 and the Americans with Disabilities Act of 1990 (ADA) which will enable students with disabilities to participate in and benefit from all postsecondary educational activities.

If you require reasonable accommodations because of a physical, mental, or learning disability, please contact the Counseling Office to obtain the necessary information to request accommodations <http://www.hccs.edu/support-services/disability-services/ada-counselors/>

Upon completion of this process, please notify your instructor as soon as possible and preferably before the end of the first two weeks of class to arrange for reasonable accommodations.

### **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

Phone: 713-718-7775

### IMPORTANT DATES:

DATE	IMPORTANCE
JUNE 5, 2020	LAST DAY FOR 100% REFUND
JUNE 8, 2020	SUMMER CLASSES BEGIN
JUNE 11, 2020	OFFICIAL DAY OF RECORD <b>LAST DAY TO OPT-OUT OF INCLUSIVE ACCESS COURSE MATERIAL</b>
JUNE 12, 2020	LAST DAY FOR 70% REFUND
JUNE 15, 2020	LAST DAY FOR 25% REFUND
JUNE 29, 2020	LAST DAY TO WITHDRAW
JULY 8, 2020	LAB PRACTICAL #3

**DISCLAIMOR:** It is your responsibility to read the syllabus in its entirety by the second class period and contact the Instructor if you have any questions and/or need clarifications. The Instructor reserves the right to modify this syllabus when necessary with adequate notification to the students.