



Genetics-11293

BIOL-2416

RT 2022 Section 0004 4 Credits 08/23/2021 to 12/12/2021 Modified 08/16/2021

Course Meetings

Course Modality

In-Person Lecture & Laboratory

Meeting Days

Tuesdays and Thursdays

Meeting Times

11:00 AM - 1:50 PM

Meeting Location

Alief-Hayes Campus, WHI 316

Lecture & Laboratory Instruction

Every Tuesday and Thursday, 11:00 AM - 1:50 PM

Alief-Hayes, WHI 316

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The course modality of this class is *In-Person*.

Faculty will hold class on-campus as per the assigned schedule.

Attendance will be taken each class period.

With the virulent Delta and Lambda SARS-Cov2 variants on the rise, I respectfully ask that we all follow CDC guidelines in terms of vaccination, social distancing, masking, and hand washing at all times, myself included.

Please note that due to the evolving COVID situation, mode of instruction may be revised as needed.

For example, I reserve the right to move labs and exams online, and/or require viewings of 1.5-2h video lectures prior to coming to class for follow-up learning activities (in that case, class time that day will be limited to 11:00AM-12:30PM).

Please see the course Canvas shell and/or email for updates.

Welcome and Instructor Information

Professor: Dr. Aukje "Tineke" Berends

Email: tineke.berends@hccs.edu

Office: WHI 307, Alief Campus

Phone: (713) 718-5875

Website: <https://learning.hccs.edu/faculty/tineke.berends> (<https://learning.hccs.edu/faculty/tineke.berends>)

What's Exciting About This Course

This course is exciting because everything you learn will be applicable to any career in the health field or your experience as a patient. You will also leave this course with a much better sense of what science is, how it works, what it can do, and what it cannot do, and you will be able to apply that knowledge to the evolving COVID situation and news coverage.

My Personal Welcome

Welcome to the course! I want you to succeed in this course. I am here for you, and will do what I can to help you learn. Never hesitate to contact me with questions or concerns!

Preferred Method of Contact

If you wish to contact me directly, please do so through **Canvas email (log into Canvas and click on the Inbox icon to get started)**, as opposed to my HCCS email address.

You can expect a response within 24 hours, excluding evenings, holidays and weekends.

Office Hours

By appointment
In-person or in WebEx

For in-person help, please stop by before or stay after class. Keep in mind I may be in the lab (WHI 316/318) or in the office (WHI 307) at that time; please look for me there.

For WebEx help, check the WebEx Office Hours and also send me a heads-up Canvas email to schedule and I will send you a WebEx meeting link. Please note I am unavailable for WebEx conferences TR 10AM-3PM, W 10AM-3PM and most F.

Course Overview

Course Description

Credits: 4 (3 lecture, 3 lab). Study of the principles of molecular and classical genetics and the function and transmission of hereditary material. May include population genetics and genetic engineering.

Requisites

Prerequisite: BIOL 1406 or BIOL 1306 + BIOL 1106; must be placed into college level reading (or take GUST 0342 as a corequisite) and be placed into college-level writing (or take ENGL 0310/0349 as a corequisite).

Department Website

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

Core Curriculum Objectives (CCOs)

BIOL 2416 satisfies the Life and Physical Sciences 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.
- **Empirical and Quantitative Skills:** Students will demonstrate manipulation and analysis of numerical data or observable facts

resulting in informed conclusions by completing textbook reading assignments, completing assignments, and answering questions on quizzes and exams.

- **Teamwork:** Students will demonstrate the ability to consider different points of view and to work effectively with others to support a shared purpose or goal by completing textbook reading assignments, completing assignments, and answering questions on quizzes and exams.

Student Learning Outcomes and Objectives

Program Student Learning Outcomes (PSLOs) for the Biology Discipline can be found at <https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/biology/>

Course Student Learning Outcomes (CSLOs)

Upon completion of BIOL 2416, the student will be able to:

1. Deduce information about genes, alleles, and gene functions from analysis of genetic crosses and patterns of inheritance.
2. Describe the molecular anatomy of genes and genomes.
3. Describe the mechanisms by which an organism's genome is passed on to the next generation.
4. Describe the phenomenon of linkage and how it affects assortment of alleles during meiosis.
5. Describe the processes that can affect the frequency of phenotypes in a population over time.
6. Compare different types of mutations and describe how each can affect genes and the corresponding mRNAs and proteins.
7. Apply the results of molecular genetic studies in model organisms to understanding aspects of human genetics and genetic diseases.
8. Interpret results from molecular analyses to determine the inheritance patterns and identities of human genes that can mutate to cause disease.
9. Describe the molecular basis of replication, transcription and translation in Eukaryotes and Prokaryotes.

Learning Objectives

Learning Objectives for each CSLO can be found at Learning Objectives for BIOL 2416

Departmental Practices and Procedures

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](#)

Student Success Information

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:

1. Reading the textbook
2. Attending class in person and/or online
3. Timely completion of assignments
4. Participating in class activities
5. 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.

Instructional Materials and Resources

Instructional Materials

The [HCC Online Bookstore \(https://hccs.bncollege.com/shop/hccs-central/page/find-textbooks\)](https://hccs.bncollege.com/shop/hccs-central/page/find-textbooks) provides searchable information on textbooks for all courses.

This course participates in the Houston Community College First Day Program. That means the **ebook (7e)** is included in your course fees at a discount, which has already been applied.

Students will access course materials through a link in Canvas.

Please note you do NOT need a code for Achieve, the publisher's homework platform. Instead all homework, handouts, and lab procedures will be posted in Canvas at no charge. Also note I also allow editions prior to 7e; you may be able to buy or rent a used print copy for less than the ebook fees! In that case, you will want to opt out of the ebook for a refund.

Instructions for opting out of the HCC First Day Program are posted in Canvas. Students who opt out will still be responsible for obtaining required course materials.

Genetics: A Conceptual Approach

Author: Pierce, B.A.

Publisher: W. H. Freeman (MacMillan Learning)

Edition: 7e (6e also accepted); Achieve not required

ISBN: 9781319349929

Availability: Inclusive Access with Connect

Price: \$60.72

Other Required Course Materials

- Please note that COVID situations are still evolving, so it is possible that in-person exams are moved online. In that case, in order to take online exams in this course, you must also have reliable access to **high speed internet**, a **web cam** (for use with our required proctoring software, Respondus Lockdown Browser and Monitor), and the **latest version of the Firefox or Chrome browser**.
- You will also need **a pen** and **a bound composition notebook** to take to every class. For an example see: https://cdn.shopify.com/s/files/1/0313/1464/0941/products/DSC_0308_4b547ce7-4205-4bc2-909f-776a57919e7e_1797x2100.jpg?v=1614345908 (https://cdn.shopify.com/s/files/1/0313/1464/0941/products/DSC_0308_4b547ce7-4205-4bc2-909f-776a57919e7e_1797x2100.jpg?v=1614345908) Any kind will do (ruled, graph paper, blank), as long as it is bound and not loose-leaf.

✓ Course Requirements

Assignments, Exams, and Activities

Type	Weight	Topic	Notes
Reading and Lecture Video Viewing Assignments	0%	Each Learning Module	<p>Please always skim the entire chapter before attempting any assignments. be sure to take good notes, preferably by hand because it will stick better. It is OK if some things do not yet make sense.</p> <p>In general, always focus on what you DON'T already know; knowing where your learning gaps are as you go will make your studying more efficient.</p>
Module Discussion Post Assignments and Quizzes	10%	Each Learning Module	<p>This grading category includes the following types of assignments to be completed in Canvas:</p> <ul style="list-style-type: none"> Module Discussion Post Assignments: In these assignments, <u>after</u> reading the book and viewing the slides, and <u>after</u> watching the lecture video, you will either post a question about something you are <u>genuinely</u> still confused about, or you may practice your knowledge by attempting to answer a classmates' question (which is a highly effective way to learn!). Posts are due the night before the relevant class and will earn you a completion grade of 100 points. There are NO late submissions for this type of assignment. Module Quizzes: The purpose of these quizzes is to assess your understanding and to help you focus your studying for each exam. Each module quiz is composed of 10 questions randomly selected from a question bank. There is no time limit and you may take each quiz up to three times. All quiz attempts are graded, but only your highest score will be recorded in the gradebook. The quiz closes the night before the relevant exam; after that no more submissions are possible. <p>A good strategy is to use the first attempt to early in your study process to see what you are up against, then use your second attempt to gauge your exam readiness <u>one week to several days</u> before the next exam (this means simulating exam conditions and taking the quiz <u>from memory</u>). The results of your second attempt should help you narrow down what you should focus on as you finish getting ready for your exam. Use your last attempt a day or so before the exam to confirm you were able to close your knowledge gaps.</p> <p>In this grading category, the 4 lowest scores will be dropped.</p>
Lab Reports and Lab Notebook	10%	Each Lab Exercise	<p>There are two types of assignments in this grading category:</p> <ul style="list-style-type: none"> Lab Reports: Each lab exercise/activities will be followed by its own lab report. These may be on paper or in Canvas. There is a penalty-free grace period of 1 week. Although students may work together as a team during lab, lab reports must be completed by each individual in his or her own words for an individual grade. There will be NO COPYING. Grades will not be returned until the grace period has closed or until all lab reports have been submitted, whichever happens first. Lab Notebook Grade: Please note that this grading category in the Canvas grade book also includes a grade for your lab notebook keeping skills at the very end of the semester. A rubric on how to keep a proper lab notebook will be provided. <p>There are NO makeups for missed labs. If a student misses lab, he/she/they may still turn in a lab report using classmates' data.</p> <p>In this grading category, the lowest grade will be dropped.</p>
Comprehensive Lab Practical Exam	10%	All Completed Lab Exercises	<p>The lab practical exam may be administered on paper or in Canvas (details TBA). To succeed on this exam you will want to study your lab reports and your lab notebook notes.</p> <p>Lab Practical Exam makeups must be arranged prior to exam time if humanly possible, and are granted in only the most extreme (and well-documented) of circumstances. Documentation must be on 3rd party, non-family official letterhead.</p>

Type	Weight	Topic	Notes
Lecture Exams	60%	Several Learning Modules	There will be a total of 4 lecture exams. Each lecture exam will cover 3-4 modules (see Canvas), and will consist of roughly 20 multiple choice, 10 fill-in-the-blank and 1-3 short answer essay questions. They may be administered on paper or in Canvas (details TBA). There are NO makeups for lecture exams. However, the lowest exam grade will be dropped.
Comprehensive Final Exam	10%	All Learning Modules (1-14)	The comprehensive Final Exam consists of roughly 50 multiple choice questions that span all modules. It is timed (75 min) and must be completed during the official final exam window. It may be administered on paper or in Canvas (details TBA). Late Final Exams are NOT accepted.

Grading Formula

Grade	Range	Notes
A	89.50 or above	Course grades ending in x.50 are rounded up. Course grades that end in x.49 or less are NOT rounded up, NO exceptions. It is on you to keep track of where you stand in the Canvas grade book at any given time during the course. DO NOT MISS ASSIGNMENTS or EXAMS! You can recover from low grades, but not from zeroes...
B	79.50-89.49	
C	69.50-79.49	
D	59.50-69.49	
F	59.49 or below	

* Instructor's Practices and Procedures

Incomplete Policy

In order to receive a grade of Incomplete ("I"), a student must have completed at least 85% of the work in the course. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

Missed Assignments/Make-Up and Extra Credit Policy

Although occasionally bonus point opportunities are offered to the entire class, there are **NO individual extra credit assignments**. Students must master the basics, and grades are based on knowledge and skills. If a student arrives at UH with a grade of A outright, next to a student who really made a B, but had his or her grade raised with extra credit, HCC course grades would lose all market value... Instead, 10% of your course grade is a completion grade, some assignments allow late submissions 1-week beyond the due date with no late penalty, and some will be dropped. Late submission and drop information on all assignments is included in the above section entitled Assignments, Exams and Activities.

There are NO makeup assignments, lecture exams, and final exams.

Academic Integrity

NO cheating, plagiarism, collusion, or even the APPEARANCE of cheating, plagiarism, collusion etc. will be tolerated.

Lecture exams and the final exam are currently scheduled to be taken in person. If however we are forced back online, prior to taking the online version of the exam, students will have to complete the mandatory Respondus Lockdown Browser and Monitor Practice Quiz (details TBA). Any **suspicious behavior** flagged by Respondus in this quiz (i.e. **no thorough environment check**

done, no ID shown, eyes off screen, audio or others in the room, looking at the screen at an extreme angle, only partial face visible, etc.) MUST be corrected by the first Unit Exam.

Scholastic Dishonesty OR APPEARANCE THEREOF will result in a zero plus Maxient Report and a referral to the Dean of Student Services.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>
(<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>)

Attendance Procedures

The official date of record is Sep 7, 2021. **You must attend lab prior to the official date of record to stay enrolled. Those who do not will be marked "never attended" and will be automatically dropped.**

The withdrawal date is Sep 29, 2021. I generally will not initiate withdrawals. **It is on YOU to initiate withdrawal procedures to receive a course grade of W.** Students who stop participating and miss excessive assignments may end up with a grade of FX. Beware that both W and FX may have financial aid and/or F-1 visa consequences.

Student Conduct

Students are expected to conduct themselves as outlined in the Student Handbook: <https://www.hccs.edu/resources-for/current-students/student-handbook/> (<https://www.hccs.edu/resources-for/current-students/student-handbook/>)

Faculty-Specific Information Regarding Canvas

This course section will use Canvas (<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu>)) to deliver in-class assignments, exams, and activities.

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

Social Justice Statement

Houston Community College is committed to furthering the cause of social justice in our community and beyond. HCC does not discriminate on the basis of race, color, religion, sex, gender identity and expression, national origin, age, disability, sexual orientation, or veteran status. I fully support that commitment and, as such, will work to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. In this course, we share in the creation and maintenance of a positive and safe learning environment. Part of this process includes acknowledging and embracing the differences among us in order to establish and reinforce that each one of us matters. I appreciate your suggestions about how to best maintain this environment of respect. If you experience any type of discrimination, please contact me and/or the Office of Institutional Equity at 713-718-8271.

HCC Policies and Information

HCC Grading System

HCC uses the following standard grading system:

Grade	Grade Interpretation	Grade Points
A	Excellent (90-100)	4
B	Good (80-89)	3
C	Fair (70-79)	2
D	Passing (60-69), except in developmental courses.	1
F	Failing (59 and below)	0
FX	Failing due to non-attendance	0
W	Withdrawn	0
I	Incomplete	0
AUD	Audit	0
IP	In Progress. Given only in certain developmental courses. A student must re-enroll to receive credit.	0
COM	Completed. Given in non-credit and continuing education courses.	0

Link to Policies in Student Handbook

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

Link to HCC Academic Integrity Statement

<https://www.hccs.edu/resources-for/faculty/student-conduct-resources-for-faculty/> (<https://www.hccs.edu/resources-for/faculty/student-conduct-resources-for-faculty/>)

Campus Carry Link

Here's the link to the HCC information about Campus Carry:

<https://www.hccs.edu/departments/police/campus-carry/> (<https://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](https://www.hccs.edu/resources-for/current-students/student-e-maileagle-id/) (<https://www.hccs.edu/resources-for/current-students/student-e-maileagle-id/>) and activate it now. You may also use Canvas Inbox to communicate.

Office of Institutional Equity

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

Ability 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 <https://www.hccs.edu/support-services/ability-services/> (<https://www.hccs.edu/support-services/ability-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/> (<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/> (<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>)

Student 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
- Completing assignments
- Participating in class activities

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

Canvas Learning Management System

Canvas is HCC's Learning Management System (LMS), and can be accessed at the following URL:

<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu>)

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

HCC Online Information and Policies

Here is the link to information about HCC Online classes, which includes access to the required Online Information Class Preview for all fully online classes: <https://www.hccs.edu/online/> (<https://www.hccs.edu/online/>)

Scoring Rubrics, Sample Assignments, etc.

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

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
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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 \(https://www.hccs.edu/resources-for/current-students/student-handbook/\)](https://www.hccs.edu/resources-for/current-students/student-handbook/)

EGLS3

The EGLS³ ([Evaluation for Greater Learning Student Survey System \(https://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/\)](https://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/)) 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.

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

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.

Student 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 \(https://www.hccs.edu/resources-for/current-students/tutoring/\)](https://www.hccs.edu/resources-for/current-students/tutoring/) 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 <https://library.hccs.edu> (<https://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 <https://www.hccs.edu/resources-for/current-students/supplemental-instruction/> (<https://www.hccs.edu/resources-for/current-students/supplemental-instruction/>).

Resources for Students:

<https://www.hccs.edu/resources-for/current-students/communicable-diseases/resources-for-students/>
(<https://www.hccs.edu/resources-for/current-students/communicable-diseases/resources-for-students/>)

Basic Needs Resources:

<https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/> (<https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/>)

Student Basic Needs Application:

https://hccs.co1.qualtrics.com/jfe/form/SV_25WyNx7NwMRz1FH
(https://hccs.co1.qualtrics.com/jfe/form/SV_25WyNx7NwMRz1FH)

COVID-19

Here's the link to the HCC information about COVID-19:

<https://www.hccs.edu/resources-for/current-students/communicable-diseases/> (<https://www.hccs.edu/resources-for/current-students/communicable-diseases/>)

Sensitive or Mature Course Content

In this college-level course, we may occasionally discuss sensitive or mature content. All members of the classroom environment, from your instructor to your fellow students, are expected to handle potentially controversial subjects with respect and consideration for one another's varied experiences and values.

Instructional Modalities

In-Person (P)

Safe, face-to-face course with scheduled dates and times

Online on a Schedule (WS)

Fully online course with virtual meetings at scheduled dates and times

Online Anytime (WW)

Traditional online course without scheduled meetings

Hybrid (H)

Course that meets safely 50% face-to-face and 50% virtually

Hybrid Lab (HL)

Lab class that meets safely 50% face-to-face and 50% virtually

Course Calendar

Syllabus Modifications

Actual lab activities during each lab exercise will depend on lab supplies. Due to COVID, supply chains have been interrupted and many shipments may be delayed. It is possible that some labs may have to be virtual. Masking logistics may also make live lecturing difficult; students may be asked to watch lecture videos prior to come to class for follow-up learning activities. **The course calendar will be posted and updated as needed in Canvas.**

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.

Additional Information

Biology Departmental/Program Information

Visit the [Biology Program Page \(https://learning.hccs.edu/programs/biology\)](https://learning.hccs.edu/programs/biology) on the HCC Learning Web for information about our faculty and courses. You will also find information about majoring in Biology.

The [Field of Study \(FOS\) Curriculum for Biology \(https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/biology/\)](https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/biology/) here at HCC covers the smallest and simplest organisms (microbiology) to the largest and most complex organisms (human anatomy and physiology, zoology, botany).

The [Associate of Science in Biology - Biology Majors & Premedical Programs \(https://www.hccs.edu/finder/programs/associate-of-science-in-biology--biology-majors--premedical-programs--field-of-study-curriculum/\)](https://www.hccs.edu/finder/programs/associate-of-science-in-biology--biology-majors--premedical-programs--field-of-study-curriculum/) FOS is intended primarily for students planning on transferring to a senior college or university to receive a baccalaureate degree in the following areas: computer science, engineering, health and natural sciences, or mathematics.

The [Associate of Science in Biology - Health Sciences Professions \(https://www.hccs.edu/finder/programs/associate-of-science-in-biology---health-sciences-professions---field-of-study-curriculum/\)](https://www.hccs.edu/finder/programs/associate-of-science-in-biology---health-sciences-professions---field-of-study-curriculum/) FOS is intended primarily for students planning on transferring to a senior college or university to receive a baccalaureate degree in the following areas: computer science, engineering, health and natural sciences, or mathematics. (Pre-Nursing, Pre-Radiologic Sciences, Pre-Clinical Laboratory Services)

Visit the [STEM Resources Page at HCC \(https://www.hccs.edu/resources-for/current-students/stem--science-technology-engineering--mathematics/\)](https://www.hccs.edu/resources-for/current-students/stem--science-technology-engineering--mathematics/): HCC has developed this site to provide information on STEM related programs and resources at HCC and other institution – to include scholarship information.

Process for Expressing Concerns about the Course

If you have concerns about any aspect of this course, please reach out to your instructor for assistance first. You can always request a meeting (virtual/ in person) to go over your concerns. If your instructor is not able to assist you, then you may wish to contact the Biology Department using this form.

[Biology Department Reporting Form \(https://forms.office.com/r/8BwrMbqCYB\)](https://forms.office.com/r/8BwrMbqCYB)

Email: hcc.biology@hccs.edu

If your instructor is not able to assist you, then you may also wish to contact the Department Chair:

Dr. Shadi Kilani

shadi.kilani@hccs.edu; 713.718.7035