



Gen Biology I-19236

BIOL-1306

RT 2022 Section 1005 3 Credits 01/18/2022 to 05/15/2022 Modified 01/12/2022

Course Meetings

Course Modality

Face to Face on the Spring Branch Campus - room TBA

Meeting Days

M&W

Meeting Mimes

11-12:20PM

Meeting Location

Spring Branch Campus - room TBA

P

M&W 11-12:20PM

Spring Branch Campus room _ TBA

P

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.

Welcome and Instructor Information

Welcome to General Biology I—I'm delighted that you have chosen this course. I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life. As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I'm available during posted office hours or during class to tackle any questions you might have. My goal is for you to walk out of the course prepared to tackle the next courses in your bucket list.

Instructor: Dr. TOM LOESCH

Email: tom.loesch@hccs.edu

Office: Spring Branch Campus rm 900P

Phone: 713 718 7340

Preferred Method of Contact

email - tom.loesch@hccs.edu

office phone - 713 718 7340

Office Hours

Monday, 9:30 AM to 10:45 AM, By Appointment at Spring Branch - 900P

Course Overview

Course Description

Credits: 3. Lecture only.

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included.

This course satisfies the Life and Physical Sciences or Component Area Option of the HCC core.

Requisites

Prerequisite: must be placed into college level reading and writing.

Class Schedule

Week 1 Ch.1 Introduction: Themes in the study of life - Evolution

Ch.2 The Chemical Context of Life

Week 2 Ch.3 Water and Life

Week 3 Ch.4 Carbon and the Molecular Diversity of Life -

Ch.5 The Structure and Function of Macromolecules

Lecture Exam 1- Ch. 1 to 3

Week 4 Ch.6 A Tour of the Cell.

Week 5 Ch.7. Membrane Structure

Lecture Exam 2 - Ch. 4 to 6

Week 6 Ch.8 An Introduction to Metabolism

Ch.9 Cellular Respiration and Fermentation

Week 7

Ch.10 Photosynthesis

Lecture Exam 3- Ch. 7-9

Week 8 Ch.11 Cell Communication

Week 9 Ch.12. The Cell Cycle

Week 10 Ch.13. Meiosis and Sexual Life Cycles

Lecture Exam 4 Ch.10 to 12

Week 11 Ch.14 Mendel and the Gene Idea

Week 12 Ch.15 The Chromosomal Basis of Inheritance

Ch.16. The Molecular Basis of Inheritance

Week 13 Ch.17 Gene Expression: From Gene to Protein

Lecture Exam 5 Ch. 13 to 16

Week 14 Ch. 18 Regulation of Gene Expression

Ch, 19 Viruses

Week 15 Ch. 20 DNA tools and Biotech.

Week 16 Lecture Exam 6 – Ch 17-20

Departmental Final Exam

Department Website

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

Core Curriculum Objectives (CCOs)

BIOL 1306 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:

- (A) **Critical Thinking Skills:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information;
- (B) **Communication Skills:** to include effective development, interpretation and expression of ideas through written, oral and visual communication;
- (C) **Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions;
- (D) **Teamwork:** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal;

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 1306, the student will be able to:

1. Describe the characteristics of life.
2. Explain the methods of inquiry used by scientists.
3. Identify the basic requirements of life and the properties of the major molecules needed for life.
4. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
5. Describe the structure of cell membranes and the movement of molecules across a membrane.
6. 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.
9. Describe the unity and diversity of life and the evidence for evolution through natural selection.
10. Develop critical thinking skills and habits of active collaborative learning.

☰ Departmental Practices and Procedures

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

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

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

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required.

As a student, it is your responsibility to:

- Attend class in person and/or online as per the assigned course modality.
- 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 the syllabus, handouts, and all assignments.
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](#)

☰ Instructional Materials and Resources

Instructional Materials

This course participates in the Houston Community College First Day Program. A discount has been applied to the required digital course materials. The discounted charge has been added to students' tuition and fee bills.

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

✓ Course Requirements

Assignments, Exams, and Activities

Type	Weight	Topic	Notes
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Type	Weight	Topic	Notes
Exams/Quizzes	70%		5 lecture exams
Mastering Homework Exercises and Quizzes	20%		
Final Exam	10%		Describe the assignment here.

Grading Formula

Grade	Range	Notes
A	100-90	
B	89-80	
C	79-70	
D	69-60	
F	59-	

* 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.

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

Missed Assignments/Make-Up Policy

There is no provision for missed assignments or missed tests. I will be dropping one of your lecture tests so any missed tests will fall in that category.

Academic Integrity

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/studentprocedures> (<https://www.hccs.edu/studentprocedures>)

Attendance Procedures

This is a face to face class and your presence is required.

Student Conduct

Students should be on time for class and be prepared with required materials including textbook and lab manual. 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.

Devices

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. 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.

Faculty-Specific Information Regarding Canvas

This course section will use Canvas (<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu>)) to supplement 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.

Faculty Statement about 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.

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 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 Catalog and Student Handbook

Here's the link to the HCC Catalog and Student Handbook: <https://catalog.hccs.edu/> (<https://catalog.hccs.edu/>)

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/student-conduct> (<https://www.hccs.edu/student-conduct>) (scroll down to subsections)

Campus Carry Link

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

<https://www.hccs.edu/campuscarry> (<https://www.hccs.edu/campuscarry>)

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 \(https://www.hccs.edu/email\)](https://www.hccs.edu/email) and activate it now. You may also use Canvas Inbox to communicate.

Office of Institutional Equity

Use the following link to access the HCC Office of Institutional Equity, Inclusion, and Engagement: <https://www.hccs.edu/eeo> (<https://www.hccs.edu/eeo>)

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/accessibility> (<https://www.hccs.edu/accessibility>)

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>)

<https://www.hccs.edu/titleix> (<https://www.hccs.edu/titleix>)

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

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 during office hours, and before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your

communication with me

- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](https://www.hccs.edu/studenthandbook) (<https://www.hccs.edu/studenthandbook>)

EGLS3

The EGLS³ ([Evaluation for Greater Learning Student Survey System](https://www.hccs.edu/egls3) (<https://www.hccs.edu/egls3>)) 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/egls3> (<https://www.hccs.edu/egls3>)

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/tutoring) (<https://www.hccs.edu/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/supplemental-instruction> (<https://www.hccs.edu/supplemental-instruction>)

Resources for Students:

<https://www.hccs.edu/covid19students> (<https://www.hccs.edu/covid19students>)

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://www.hccs.edu/basicneeds> (<https://www.hccs.edu/basicneeds>)

COVID-19

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

<https://www.hccs.edu/covid-19> (<https://www.hccs.edu/covid-19>)

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

Copyright Statement

In order to uphold the integrity of the academic environment and protect and foster a cohesive learning environment for all, HCC prohibits unauthorized use of course materials. Materials shared in this course are based on my professional knowledge and experience and are presented in an educational context for the students in the course. Authorized use of course materials is limited to personal study or educational uses. Material should not be shared, distributed, or sold outside the course without permission. Students are also explicitly forbidden in all circumstances from plagiarizing or appropriating course materials. This includes but is not limited to publically posting quizzes, essays, or other materials. This prohibition extends not only during this course, but after. Sharing of the materials in any context will be a violation of the HCC Student Code of Conduct and may subject the student to discipline, as well as any applicable civil or criminal liability. Consequences for unauthorized sharing, plagiarizing, or other methods of academic dishonesty may range from a 0 on the specified assignment and/or up to expulsion from Houston Community College. Questions about this policy may be directed to me or to the Manager of Student Conduct and Academic Integrity.

Course Calendar

Class Schedule

Week 1 Ch.1 Introduction: Themes in the study of life

Week 2 Ch.2 The Chemical Context of Life & Water and Life

Week 3 Ch.3 Carbon and the Molecular Diversity of Life - The Structure and Function of Macromolecules

Week 4 Ch.4 A Tour of the Cell.

Lecture Exam 1 Ch. 1 to 3

Week 5 Ch.5 Membrane Structure and Function

Week 6 Ch.6 An Introduction to Metabolism

Week 7 Ch.7. Cellular Respiration and Fermentation

Lecture Exam 2 Ch. 4 to 6

Week 8 Ch.8 Photosynthesis

Week 9 Ch.9 The Cell Cycle.

Week 10 Ch.10 Meiosis and Sexual Life Cycles

Lecture Exam Ch. 7-9

Week 11 Ch.11 Mendel and the Gene Idea

Week 12 Ch.12. The Chromosomal Basis of Inheritance

Week 13 Ch.13. The Molecular Basis of Inheritance

Lecture Exam 4 Ch.10 to 12

Week 14 Ch.14 Gene Expression: From Gene to Protein

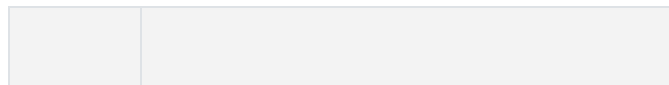
Week 15 Ch.15 Regulation of Gene Expression

Ch.16. Development, Stem Cells and Cancer

Week 16 Ch.17 Viruses

Lecture Exam 5 Ch. 13 to 17

Final Exam



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.

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 \(https://catalog.hccs.edu/preview_program.php?catoid=3&poid=905\)](https://catalog.hccs.edu/preview_program.php?catoid=3&poid=905) 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 \(https://catalog.hccs.edu/preview_program.php?catoid=3&poid=906\)](https://catalog.hccs.edu/preview_program.php?catoid=3&poid=906) 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)

Department Chair: Dr. Shadi Kilani

Department Email: hcc.biology@hccs.edu

Department Phone : 713 718 5587