



Division of Earth, Life & Natural Sciences
Biology Department

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

BIOL 1407: General Biology II | Lecture and Laboratory | CRN14654

Fall 2019 | 16 Weeks (8.26.2019-12.15.2019)

In-Person | Stafford Scarcella Rm W116 | Tue 11 a.m.-1:50 p.m

Thurs 11 a.m -1:50 p.m S108

3 Credit Hours | 48 hours per semester

Instructor Contact Information

Instructor: Dr. Leena Sawant Ph.D.
Office: Stafford Campus Rm S106
HCC Email: leena.sawant@hccs.edu

Office Phone: 713 718 2395
Office Hours: By Appointment Only
Office Location: Stafford Scarcella Bldg

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 my hccs email address: leena.sawant@hccs.edu

I will respond to emails within 24-48 hours Monday through Friday; I will reply to weekend messages during the following week. 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.

What's Exciting About This Course

Biology is an endless adventure as there are constantly new developments in this area. This course is fascinating as it is the study of endless forms of life on earth, how organisms evolve, and the interaction between living organisms and how human activities affect this interaction. Learning about the human body's complex systems enables you to make better decisions for your health and the health of others.

My Personal Welcome

Welcome to General Biology II—I'm very pleased that you have chosen this course where I can be your guide. I will present the information in the most exciting way I know, so that you can understand the important topics/concepts and apply them now and hopefully throughout your life. As you read through the chapters you will come across 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 to answer your questions. My goal is for you to walk out of the course with a better understanding of yourself and of human behavior. 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.

Note: It is recommended that BIOL 1306/1106 Biology for Science Majors I (lecture + lab) be taken before BIOL 1407

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.

Scoring Rubrics, Sample Assignments, etc.

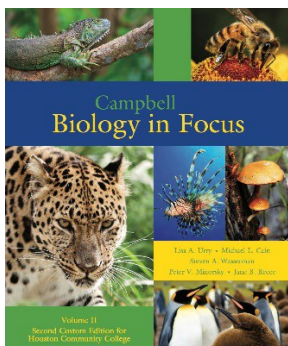
When applicable, look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course.

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

Instructional Materials

Required Resources

The textbook listed below is **required** for this course.



"Campbell Biology in Focus", Volume 2 with Modified Mastering Biology Package for Houston Community College, 1/e Pearson. ISBN: 1323751440 // 9781323751442

The laboratory manual listed below is required for this course.

Biology 1407 Lab Manual: Used at Southwest, Northwest and Northeast

"Biology 1407 Laboratory manual", 4th Edition, Blue Door Publishing. ISBN: 978-1-68135-062-2

The book is included in a package that contains the text as well as an access code and are found at the [HCC Bookstore](#). You may either use a hard copy of the book, or rent the e-book from Pearson. Order your book and laboratory manual here: [HCC Bookstore](#)

Suggested Resources



HCCS Biology Lab Study Pages

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

STEM Website for students: www.hccs.edu/stem

Great information on science clubs, seminars, symposium, and research opportunities that are available to HCC students. Check back often- updated regularly.

Career Planning and Resources: Help with resume building and internships. <http://www.hccs.edu/support-services/career-planning/>

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

In BIOL 1407, the diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Laboratory activities will reinforce study of the diversity and classification of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

Core Curriculum Objectives (CCOs)

BIOL 1407 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 explore the scientific research methods that are used in the study of biology. They will be able to interpret numerical data in charts, graphs, and tables that are in their textbooks and other resources. Students should be able to carry out basic mathematical operations: be able to use Hardy and Weinberg equations, calculate percentages, frequencies, complete textbook reading assignments and answer questions on quizzes and exams that pertain to Course Student Learning Outcome # 7
- **Social Responsibility:** Students will demonstrate the ability to engage effectively in class activities and discussion, complete textbook reading assignments, and answer questions on quizzes and exams that pertain to Course Student Learning Outcome #9 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 1407, students will:

1. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macro evolution, and speciation.
2. Describe phylogenetic relationships and classification schemes.
3. Identify the major phyla of life with an emphasis on plants and animals including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
4. Describe basic animal physiology and homeostasis, as maintained by organ systems.
5. Compare different sexual and asexual life cycles noting their adaptive advantages.
6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.
7. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
8. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
9. Communicate effectively the results of scientific investigations.

Learning Objectives

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

Student Success

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

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

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

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

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

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- 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

Exams

Lecture Exams (50%): There will be 4 lecture exams, 2 lab. exams and 2 final exams. Lecture exams will consist of mostly multiple-choice questions and a one or two short answer questions. Out of the 4 lecture exams only 3 will be considered towards your final grade. They will cover material we cover in class, important concepts, figures and discussion from the text book. You will get a maximum of one hour or one and half-hour period to complete your lecture exam. The lecture or lab. exams will follow either lecture or lab. exercise.

Lab Exams (20%): There will be two lab exams for this course. The first lab exam will cover the first half of the lab exercises and the second lab. exam will cover the second half of the lab. exercises in your lab. manual. You will have two parts for the lab. exam: Part 1 will be lab. stations and Part 2 will be multiple choice to be answered on a scantron.

Final Exam (10%): The final exam will be comprehensive (it will cover all the chapters). There will be a departmental final that all students need to take. You will take 2 final exams one by the department and one by your instructor on the same day. The average of both final exams will be included in your final grade.

Online: Homework Assignments and Quizzes:

Mastering Biology (5%): There will be mandatory online homework assignment on the Mastering Biology. You can access the assignments from **Eagle Online** by clicking on the "MyLab and Mastering" link on the left column. Each student is responsible to register for mastering biology using an access code. The access code comes with the new book. **You can register for mastering free for 14 days.** Before the free trial period ends you will have to purchase the access code.

Online Quiz on Canvas (5%): The quizzes are 5% of your grade. The due dates for the assignments and quizzes will not be extended. Please read the instructions before you start taking the assignments and quizzes.

Project/ Team Activity (5%): There will be a few activities or projects that you will conduct as a team either in class or as a homework assignment. Any student who fails to participate in the team projects will not be given the grade. Information regarding the team project will be given to you during the first week. Any assignments turned in after the due date will not be graded and will receive a zero.

Lab Reports (5%): Each student is responsible for completing their lab report in a timely manner. Incomplete lab reports will not be graded and will receive a zero.

Grading Formula

All the exams will be considered towards final grade.

Three Lecture exams & two Final exams = 60%

Homework Assignments on Mastering Biology = 5%

Group activities/project/s = 5%

Online Quiz = 5%

Two laboratory exams = 20%

Lab. Report and Lab. participation = 5%

Grade	Total Points
A	90-100
B	80-89
C	70-79
D	60-69
F	<60

Campbell Biology in Focus General Biology II (Biol1407) Class Schedule Fall 2019 CRN 14654

Class time: 11am to 1:50pm Tuesday, Lab S108. Thursday, Lecture Rm W116

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	Dates	Lecture	Lab. Schedule
1	8/27 8/29	Ch. 19 Descent with Modification Ch. 20 Phylogeny	
2	9/3 9/5	Ch. 21 Evolution of Population Ch. 22 Origin of Species	Lab.1 Human Genetics
3	9/10 9/12	Ch. 23 Broad Patterns of Evolution Ch. 24 Early life-Diversification of Prokaryotes	Lab.2 Evolutionary Observations
4	9/17 9/19	Lecture Ex1-Ch.19, 20, 21, 22 & 23 Ch. 25 Origin/Diversification of Eukaryotes	Lab.3 Bacteria
5	9/24 9/26	Ch. 26 Colonization of Land Ch. 27 Rise of Animal Diversity Concept Map 1 due	Lab. 4 Protista
6	10/1 10/3	Ch. 28 Plant Structure and Growth Ch. 29 Acquisition, Nutrition and Transport	Lab. 5 Fungi
7	10/8 10/10	Ch. 30 Plant Reproduction Lecture Exam 2 Ch. 24, 25 & 26	Lab. 6 Plants
8	10/15 10/17	Ch. 31 Plant Response to Internal & External Signals Lab. Exam 1 (Labs 1 to 6)	Lab. 7 Invertebrates Lab. Exam 1 (Labs 1 to 6) Labreports due
9	10/22 10/24	Ch. 32 Internal Environment of animals Ch. 31 contd Quiz 1 due Oct 27	Lab. 8 Animal Tissue
10	10/29 10/31 11/1	Ch. 33 Animal Nutrition Concept Map 2 due Ch. 34 Circulation & Gas Exchange Last Day for withdrawal Nov 2nd by 4:30PM	Lab.11 Urinary System
11	11/5 11/7	Lecture Exam 3 Ch. 27, 32 & 33 Concept Map 3 due Ch. 34 contd	Lab. 9 Circulatory System
12	11/12 11/14	Ch. 35 The Immune System Concept Map 4 due Ch. 36 Reproduction and Development (Self Study)	Lab. 10 The Respiratory System
13	11/19 11/21	Ch. 37 Neurons, Synapses and Signaling Thanksgiving holiday	
14	11/26 11/28	Ch. 40 Population Ecology Ch. 41 Species Interaction Lecture Exam 4 Ch. 34,35, 36 & 37 Concept Map 5 due	
15	12/3 12/5	Ch. 42 Ecosystems and Energy Lab. Exam 2 (Labs. 7 to 11)	Lab. Exam 2 (Labs. 7 to 11) Labreports due
16	12/10	Final Exam Comprehensive (Ch. 19 to 42)	

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.

Incomplete Policy:

In this course, the purposes of the "I" (incomplete) grade is for students who are caught up and passing at the student withdrawal deadline, and then have a medical or other problem that prevents them from completing the course. If you are not passing at the student withdrawal deadline, you should drop yourself from the course, or you will likely earn an "F." An incomplete "I" grade will be given only if all of the following conditions are met:

- ✓ You have earned at least 85% of the available points by the date that the "I" grade is requested.
- ✓ You can provide documentation showing why you should earn an incomplete, such as a doctor's note, etc.
- ✓ You must be passing with a grade of "C" or better.
- ✓ You must request the incomplete in writing BEFORE **December 2nd 2019**
- ✓ 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:

Please refer to your detailed syllabus on Canvas

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 Examination: There will be no make-up exams and final exams are mandatory. If you miss a lecture exam due to a medical or any other emergency, it will be replaced with the grade you earned on the final exam only if you provide an official doctors note or any other official document with the reason for missing the exam within two days. Please note: All students are required to take the final exam. Failure to take the final exam will result in an 'F' grade.

Missed Assignments or Quizzes: If you turn in an assignment or quiz after the due date you will not receive any grade. If you had an emergency and could not turn in the assignment on the due date you will receive 50% grade only if you email me the same day and turn in the assignment the next day. Please note that I reserve the right to refuse to grade late assignments if you do not have a valid.

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 or program, or expelled from school, may be imposed on a student 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: 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.

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. No use of any electronic devices during the class period. 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. Disruptive behavior may result in removal from the class.

Instructor's Course-Specific Information

Canvas: Eagle Online: <http://eagleonline.hccs.edu>

Your Username is the same as your student ID number used for registration. (For example: W0034567). Your default password is "distance". Once you login the first time, you should change the password.

Electronic Devices

Absolutely no phone or other personal electronic devices are to be used during class (lecture and lab) unless permission is obtained from the professor. 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.

Biology Program Information

The Biology area of study here at HCC covers the smallest and simplest organisms (microbiology) to the largest and most complex organisms (human anatomy and physiology, zoology, botany).

AWARD TYPES: Associate in Science

AREA OF STUDY: Science, Technology, Engineering & Math

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

HCC Policies

Here's the link to the HCC Student Handbook <http://www.hccs.edu/resources-for/current-students/student-handbook/> In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

EGLS³

The EGLS³ (Evaluation for Greater Learning Student Survey System) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. EGLS³ surveys are not offered during the Summer semester due to logistical constraints.

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

Campus Carry Link

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

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

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go [to HCC Eagle ID](#) and activate it now. You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

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

Disability Services

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

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu
<http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/>

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>

Department Chair Contact Information

Dr. DaeJan Grigsby
Email: daejan.grigsby@hccs.edu
Phone: 713-718-7775