



HOUSTON COMMUNITY COLLEGE (CENTRAL)

NATURAL SCIENCES AND HORTICULTURE DIVISION: BIOLOGY DEPARTMENT

GENERAL BIOLOGY I FOR SCIENCE MAJORS BIOL 1306/CRN # 13528

Instruction Mode: (In Person)

INSTRUCTOR CONTACT INFORMATION

**Instructor: Dr. Gideon
Adjei**

Office: SJAC 215

**Office Phone:
7137186352**

**Office Hours:
MoWe 2:00-
3:30PM**

E-mail:

gideon.adjei@hccs.edu

WELCOME TO

Course Title: GENERAL BIOLOGY 1

**Semester and Year: Summer 1,
2019**

Course Prefix: BIOL 1306

Course Number: 13528

Class Days & Times:

Credit Hours: 3

**Lecture: Day, Time, Room #: Mo Tu
We Th; 0800-1015 AM LHSB304**

COURSE OVERVIEW

Program Student Learning Outcomes (PSLOs) for the Biology Discipline

1. Will display an understanding of biological systems and evolutionary processes spanning all ranges of biological complexity, including atoms, molecules, genes, cells, and organisms.
2. Will integrate factual and conceptual information into an understanding of scientific data by written, oral and/or visual communication. (This may include successful completion of

- a course-specific research project or a case study module).
3. Will demonstrate proficiency and safe practices in the use of laboratory equipment and basic laboratory techniques.
 4. Will apply principles of the scientific method to problems in biology in the collection, recording, quantitative measurement, analysis and reporting of scientific data.

Course Description and Student Learning Outcomes (CSLOs)

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.

Completion of the specific Student Learning Outcomes listed below does NOT and will NOT guarantee the student any specific final course grade at the end of the semester!

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.
11. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
12. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
13. Communicate effectively the results of scientific investigations

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

GETTING READY

Prerequisites:

Math 0106 or higher placement by testing, must be placed in college level reading.

Co-requisites: None

Required Material:

Textbook: Valuepack

Title: "Campbell Biology in Focus, Volume I with Modified MasteringBiology Package for Houston Community College" **ISBN:** [1323751432 // 9781323751435](#)

Learning Web: Syllabus and other relevant course information may be posted on the Learning web found at the following link: <http://learning.hccs.edu/faculty/>

CANVAS: Assignments may be posted online on Eagle online CANVAS found at the following link: eagleonline.hccs.edu Your Username is same as your student ID number used for registration (For example: W0034567). Your default password is "distance". Once you log-in, you can change the password.

Other Materials and resources:

STEM Website for students: <http://www.hccs.edu/resources-for/current-students/stem--science-technology-engineering--mathematics/>

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

Tutoring: <http://ctle3.hccs.edu/alltutoring/>

Get expert one-on-one help, Online or In Campus, specifically for HCC students.

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. You will note that I have tried to schedule exams on Mondays to enable students to study over the weekend. Read the scheduled chapters in advance. Do not wait for me to cover a chapter before you read it. Questions you may have as you read the chapters in advance will become clearer as we cover it in class.

Week of	LECTURE
06/03	CLASS ORIENTATION Chapter 1 Introduction: Evolution and the Foundations of Biology
06/04	Chapter 2 The Molecules of Life
06/05	Chapter 3 Carbon and the Molecular diversity of Life
06/06	Chapter 4 A Tour of the Cell. Review Ch-1-4

06/10	<p>LECTURE EXAM #1 (Chaps 1-4)</p> <p>Chapter 5 Membrane Transport and Cell Signaling</p>
06/11	<p>Chapter 5 (Cont'd)</p>
06/12	<p>Chapter 6 An Introduction to Metabolism</p> <p>Chapter 7 Cellular Respiration</p>
06/13	<p>Chapter 8 Photosynthesis Review Chapters 5-8</p>
06/17	<p>LECTURE EXAM #2 (Chaps 5-8)</p> <p>Begin Chapter 9 The Cell Cycle</p>
06/18	<p>Chapter 10 Meiosis and Sexual Life Cycles</p>
06/19	<p>Chapter 11 Mendel and the Gene Idea</p>

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06/20	Chapter 12: The Chromosomal Basis of Inheritance Review Chapters 9-12
06/24	LECTURE EXAM #3 (Chaps 9-12) Begin Chapter 13 The Molecular Basis of Inheritance
06/25	Chapter 14 Gene Expression: From Gene to Protein
06/26	Chapter 15 Regulation of gene Expression Chapter 16 Development, Stem Cells and Cancer
06/27	Chapter 17 Viruses Review Chapters 13-17
07/01 07/02 07/03	LECTURE EXAM #4 (Chaps 13-17) Review for Final Comprehensive Final Exam

INSTRUCTOR GUIDELINES AND POLICIES .

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. 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.

Assignments: Please check Publisher's site for due dates of Mastering Biology Assignments. **I will not reset due dates once assigned.** A Special Project Assignment may be given toward the middle of the semester. Students will be notified one week in advance of this assignment.

Exams/Quizzes: Lecture exams will be in objective format, and would be a composite of multiple choice, True/False, Fill in the Blanks and labelling of diagrams. The exam will be administered during the first hour on the scheduled date so that we can cover new material. Therefore, pace yourself accordingly to complete the exam. Students are responsible for keeping track of their exam grades so that they can determine their performance in the class. **No electronic devices are permitted during exams. Any student caught cheating on an exam will receive a grade of zero (0) for that exam.**

Make-up Exams/Quizzes: No make-up exams will be given. However, the lowest test score, except the final exam will be dropped.

Instructor's Incomplete Policy. A passing student may get an "I" (Incomplete) only under circumstances beyond their control such as a verifiable serious illness, involvement in a major accident requiring confinement to a hospital or surgery. An "I" Contract must be signed by the student and instructor under such circumstances. In order to change the grade from an "I", the student will have to complete the required material specified by the instructor by the end of the next full semester. Otherwise the "I" will automatically convert to an "F."

Project: The Special Project that will be assigned will require library work. Detailed instructions will be stipulated on the assignment.

Extra Credit: No extra credit will be given. The Special Project assignment should give students the opportunity to boost their grades.

Notes: Lecture notes will be presented in power point format. Students are encouraged to take notes in class or make their own notes. Several notes are available on the internet by various instructors at other institutions.

IN CLASS TECHNOLOGY (Cell Phones, Laptops, etc.) Please turn off all cell phones, I-phones, pagers, beepers etc.

INSTRUCTORS'S ASSURANCE. Lecture exams will be graded within one week of the test date. All exams remain the property of the instructor. Efforts will be made to go over exams with students in class as part of their learning process.

BEHAVIOR AND ETIQUETTE

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

DRESS CODE

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

QUESTIONS/PROBLEMS: Please make sure that if you have any questions or problems at any time, that you first contact me as soon as possible. The worst thing you can do is wait to contact me or to

not take advantage of the resources available to you. By taking an active part in your education, you will make your academic experience much more rewarding and exciting!!

EGLS₃ (Evaluation for Greater Learning Student Survey System)

- At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. For more information, go to <http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/> .

GRADE DETERMINATION: Breakdown of Final Grade Computation- Lecture Exams 70%; Mastering Biology 10%; Special Project 10%, Final Exam 10%.

The HCC grading scale is:

- A = 100 – 90;.....4 points per semester hour
- B = 89 – 80:3 points per semester hour
- C = 79 – 70:2 points per semester hour
- D = 69 – 60:1 point per semester hour
- 59 and below = F.....0 points per semester hour
- IP (In Progress)0 points per semester hour
- W(Withdrawn).....0 points per semester hour
- I (Incomplete).....0 points per semester hour

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

REPEATING COURSES (THREE-PEAT RULE)

As a result of recent Texas legislative changes, please be advised that HCC is charging additional tuition for students who enroll in the same class three or more times at HCC. While it is the hope of HCC that students will be successful in their first attempt at classes, we realize that life demands, academic struggles, and other issues may result in students needing to take the same class more than once. Speaking with an advisor will help you develop student success skills, improving your overall academic performance. If a student repeats a course in which a grade (A-F) has been received, the highest grade received at HCC is the permanent grade for the course and will be used in computing the GPA. All grades earned in a given course will be reflected on the transcript. Other colleges may compute the GPA differently than HCC.

COURSE WITHDRAWALS (6-Drop Rule)

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

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

In addition, withdrawing from a course may impact your financial aid award or eligibility. Contact the Financial Aid Office or website to learn more about the impact of withdrawing on financial aid.

HCCS IS COMMITTED TO YOUR SUCCESS

Early Intervention Program and Services

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

Tutoring

HCCS provides free online and on campus tutoring for all HCC students. Go to <http://ctle3.hccs.edu/alltutoring/>

Counseling Services

Counseling services are available to students who are experiencing difficulty with academic issues, selection of college major, career planning, disability accommodations, or personal issues.

<http://learning.hccs.edu/programs/counseling>

AMERICANS WITH DISABILITIES ACT STATEMENT

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

If you require reasonable accommodations because of a physical, mental, or learning disability, please contact the Counseling Office to obtain the necessary information to request accommodations

<http://www.hccs.edu/support-services/disability-services/>

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

ACADEMIC INTEGRITY

This instructor is committed to a high standard of academic integrity in the academic community. In becoming a part of the academic community, students are responsible for honesty and independent effort. Failure to uphold these standards includes, but is not limited to, the following: plagiarizing written work or projects, cheating on exams or assignments, collusion on an exam or project, and misrepresentation of credentials or prerequisites when registering for a course. Cheating includes looking at or copying from another student's exam, orally communicating or receiving answers during an exam, having another person take an exam or complete a project or assignment, using unauthorized notes, texts, or other materials for an exam, and obtaining or distributing an unauthorized copy of an exam or any part of an exam. Plagiarism means passing off as his/her own the ideas or writings of another (that is, without giving proper credit by documenting sources). Plagiarism includes submitting a paper, report, or project that someone else has prepared, in whole or in part. Collusion is inappropriately collaborating on assignments designed to be completed independently. These definitions are not exhaustive. When there is clear evidence of cheating, plagiarism, collusion, or misrepresentation, disciplinary action may include but is not limited to requiring you to retake or resubmit an exam or assignment, assigning a grade of zero or "F" for an exam or assignment; or assigning a grade of "F" for the course. Additional sanctions including being withdrawn from the course, program or expelled from school may be imposed on a students who violate the standards of academic integrity.

STUDENT BEHAVIOR EXPECTATIONS

Students are expected to conduct themselves appropriately while on College property or in an online environment. The instructor would institute established HCCS disciplinary action. Students who pose a threat to the safety of others will be subject to immediate withdrawal from the classroom. Please refer to the HCC Student Handbook.

COMPUTER VIRUS PROTECTION

Computer viruses are, unfortunately, a fact of life. Using removable devices on more than one computer creates the possibility of infecting computers and diskettes with a computer virus. This exposes the computers of the college, your personal computer, and any others you may be using to potentially damaging viruses. The college has aggressive anti-virus procedures in place to protect its computers, but cannot guarantee that a virus might not temporarily infect one of its machines. It is your responsibility to protect all computers under your control and use and ensure that each diskette you use, whenever or wherever you use it, has been scanned with anti-virus software. Since new viruses arise continually, your anti-virus software must be kept current. And, since no anti-virus software will find every virus, keeping backup copies is extremely important.

EQUAL OPPORTUNITY STATEMENT

It is the policy of the HCCS to provide equal employment, admission and educational opportunities without regard to race, color, creed, national origin, gender, age, veteran's status, sexual orientation, or disability.

FERPA

The academic, financial and non-directory information on your student account is confidential and protected by the Family Educational Rights & Privacy Act (FERPA). We cannot release certain information to another person without your written authorization. Further information regarding Student Records and FERPA can be found at; <http://www.hccs.edu/district/about-us/procedures/student-rights-policies--procedures/>

TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEQ.

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 Houston, TX 77266-7517 or Institutional.Equity@hccs.edu

HCC Campus Carry

At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/departments/police/campus-carry/>

FINAL EXAMINATIONS

A final evaluation activity will occur during the published final evaluation period. The appropriate dean, director, or department chair must approve any variation to this schedule.

HCC Online and/or Continuing Education Policies

All students are responsible for reading and understanding the HCC Online Student Handbook, which contains policies, information about conduct, and other important information. For the HCC Online Student Handbook click on the link below or go to the HCC Online page on the HCC website. The HCC Online Student Handbook contains policies and procedures unique to the online student. Students should have reviewed the handbook as part of the mandatory orientation. It is the student's responsibility to be familiar with the handbook's contents. The handbook contains valuable information, answers, and resources, such as HCC Online contacts, policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information,

testing procedures, technical support, and academic calendars. Refer to the HCC Online Student Handbook by visiting this link:
<http://www.hccs.edu/media/houston-community-college/distance-education/student-services/HCC-Online-Student-Handbook.pdf>

Access CE Policies on their Web site:

<http://www.hccs.edu/online/student-services/course-orientations/>

IMPORTANT DATES:

June 6 Official Day of Record

June 24 Last Day to Withdraw

July 2 Last Day of Instruction

July 3 Comprehensive Departmental Final

DISCLAIMER: It is your responsibility to read the syllabus in its entirety on the first day of class. Please let the professor know immediately if you have any questions and/or need clarifications.