



HOUSTON COMMUNITY COLLEGE (Central College)  
NATURAL SCIENCES AND HORTICULTURE DIVISION: BIOLOGY DEPARTMENT  
GENERAL BIOLOGY I FOR SCIENCE MAJORS (LECTURE) BIOL 1306  
CRN # 19289  
Instruction Mode: In Person  
Regular Term (16 weeks)  
Fall 2018

**WELCOME TO**

**Course:** GENERAL BIOLOGY I FOR SCIENCE MAJORS Lecture (BIOL 1306) CRN # 19289  
**Lecture:** Monday & Wednesday 9.30-10.50 AM. Room LHSB314  
**Credit Hours:** 3: 3 hours lecture per week

**INSTRUCTOR CONTACT INFORMATION**

**Instructor:** Dr. Pauline Ward  
**Email:** Please use the Eagle online/Canvas messaging system. Only in the event that Canvas is offline, please email me at [Pauline.ward@hccs.edu](mailto:Pauline.ward@hccs.edu). I only respond to HCC email addresses (not gmail, etc)  
**Office:** LHSB 401, Central College, 1300 Holman Street, Houston, TX, 77004. Please go to LHSB 401, the faculty offices, and call my extension when you are there so I can open the door.  
**Phone:** 713 718 2538  
**Office hours:** Mondays and Wednesdays 2-3.30PM

**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.

### **GETTING READY**

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

**Co-requisites:** It is highly recommended that you co enroll in BIOL 1106 (General Biology I Lab)

**Required Material: Textbook:** "Campbell Biology in Focus, Volume I with Modified MasteringBiology Valuepack Package for Houston Community College" ISBN: 9781323751435. Detailed instructions for registering on "Mastering" will be provided on CANVAS and discussed on the first day of class. "Mastering" will be used for Homework and it is also a valuable resource with a student learning center complete with several interactive resources including videos, animations and quizzes.

**Please Note:** For the first ~ 2 weeks, you may sign up without charge for mastering using a temporary access code. Important: You MUST pay for access before this complimentary access time runs out. If you do not, all your work will be lost and will not be able to be recovered (even if you pay for access at a later date)

**Learning Web:** Syllabus is posted on the Learning web found at the following link:

<http://learning.hccs.edu/faculty/pauline.ward>

**Eagle Online 2 (Canvas)**

The course material will be accessible through Eagle online with an account password and is to be used only for this course and only by you, the student. You will have access on the first day of the semester, after enrolling into the course at: <https://eagleonline.hccs.edu/login/ldap>. You must use Firefox or Chrome to log-in. Your Eagle Online 2 **username** and **password** are the same as your HCC Email (issued upon enrollment through the Student System). Please check the "Announcement" tab in Eagle online daily for important information and course updates. All email correspondence to me must be through the Eagle Online messaging system. I will not respond to personal email accounts such as gmail.

**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:** Important Statement. **The Instructor reserves the right to change the outline if needed.**

<b>Week of</b>	<b>LECTURE</b>
1. Aug 27	<b>Chapter 1:</b> Introduction: Evolution and the Foundations of Biology <b>Chapter 2</b> The Chemical Context of Life
2. Sept 3	<b>Monday Sept 3 Labor Day: No class</b> <b>Chapter 2</b> The Chemical Context of Life- <i>cont</i>
3. Sept 10	<b>Chapter 3</b> Carbon and the Molecular diversity of Life-
4. Sept 17	<b>Chapter 4 A Tour of the Cell</b> <b>Mastering Homework (Chaps 1-4) due Sun Sept 23</b>
5. Sept 24	<b>Monday Sept 24. LECTURE EXAM #1 (Chaps 1-4)</b> <b>Chapter 5</b> Membrane Transport and Cell Signaling
6. Oct 1	<b>Chapter 5</b> Membrane Transport and Cell Signaling- <i>cont</i> <b>Chapter 6</b> An Introduction to Metabolism
7. Oct 8	<b>Chapter 7</b> Cellular Respiration
8. Oct 15	<b>Chapter 8</b> Photosynthesis <b>Mastering Homework (Chaps 5-8) due Sun Oct 21</b>
9. Oct 22	<b>Monday, Oct 22. LECTURE EXAM #2 (Chaps 5-8)</b> <b>Chapter 9</b> The Cell Cycle
10. Oct 29	<b>Chapter 10</b> Meiosis and Sexual Life Cycles <b>Chapter 11</b> Mendel and the Gene Idea
11. Nov 5	<b>Chapter 11</b> Mendel and the Gene Idea- <i>cont</i> <b>Chapter 12:</b> The Chromosomal Basis of Inheritance <b>Mastering Homework (Chaps 9-12) due Sun Nov 11</b>
12. Nov 12	<b>Monday, Nov 12. LECTURE EXAM #3 (Chaps 9-12)</b> <b>Chapter 13</b> The Molecular Basis of Inheritance
13. Nov 19	<b>Chapter 14</b> Gene Expression: From Gene to Protein
14. Nov 26	<b>Chapter 15</b> Regulation of gene Expression <b>Chapter 16</b> Development, Stem Cells and Cancer <b>Mastering Homework (Chaps 13-17) due Sun Dec 2</b>
15. Dec 3	<b>Chapter 17</b> Viruses <b>Wednesday, Dec 5. LECTURE EXAM #4 (Chaps 13-17)</b>
16. Dec 10	<b>Monday Dec 10, 9 AM Departmental Final Comprehensive Exam (Mandatory)</b>

## **INSTRUCTOR GUIDELINES, RULES AND POLICIES**

- 1. Attendance** is mandated by the state. Students are expected to be in attendance for the entirety of the scheduled class. Attendance will be recorded **at any time during the class session** and will be given only if you attend full class period. Tardiness will not be accepted. Coming late to the class or leaving early for whatever reason, is considered a disruption and no attendance will be given for that day. You are responsible for everything covered or announced during your absence. More than four unexcused absences may result in an administrative and/or instructor withdrawal without notice. If you stop attending the course or do not participate in the assessment, **you are** responsible for withdrawing from the course before the withdrawal deadline (Nov 2<sup>nd</sup> by 4.30 pm). Failing to do so will result in an FX grade at the end of the semester.
- 2.** Textbook is required.
- 3.** If you are late for an exam, you will be allowed to take the exam if 1) you arrive less than 15 minutes after the class has started and 2) as long as no one else has completed the exam and left the room. Also, you will get only the remaining time to take your exam. No bathroom breaks during exams.
- 4.** If you miss one exam, that exam will automatically become your drop exam. If, for whatever reason, you miss a second exam, it will be counted as a zero score.
- 5. NO MAKE-UP EXAMS** will be given unless exceptional circumstances. There must be a valid documented reason for a make-up exam and it must be pre-approved by the instructor. Acceptable reasons include hospitalization, doctor's certification that the student was unfit to write the exam, or subpoenas for court appearances. Make-up requests must be submitted in writing, with the appropriate official documentation. Makeup exams must be taken by the time designated by the instructor. The format of the make-up exam may vary from the scheduled examination.
- 6. Cellphone, Laptop, Camera, Recording and/or other Electronic Devices** are prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. If electronic devices are used during a test, a grade of F will automatically be assigned. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations.
- 7. No children** are allowed in the classroom.

8. **Grade status:** Grades will be posted on Eagle online. At the end of the semester, your overall grade will be available through HCC
9. **CHEATING IS NOT PERMITTED!!!**  
Please sign the last sheet of the syllabus and return to the Instructor on the first week of class. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty.
10. **Course material handed out in class or posted online is for your personal use only and it is not permissible to share or distribute any of this material without my prior consent.**
11. **Classroom Behavior** As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. All students in HCC are required to follow all HCC Policies & Procedures, the Student Code of Conduct, the Student Handbook, and relevant sections of the Texas Education Code, both in the classroom and online in our Canvas supplemental course. Students who violate these policies and guidelines will be subject to disciplinary action that could include denial of access to course-related email, discussion groups, or being removed from the class.  
Please refer to **Student Handbook** for complete instructions and rules  
<http://www.hccs.edu/resources-for/current-students/student-handbook/>
12. **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!!

## **TESTING AND GRADING**

Important Notice: Exams and assignments may include material covered in class (activities, handouts, notes, etc), in addition to material in PowerPoints, reviews and textbook. You are responsible for obtaining all material covered in in class.

### **Lecture Exams (66%)**

**Lecture Exams:** There will be a total of four regular lecture exams (not including a compulsory **Comprehensive final** exam, see below). Each exam will contain a number of questions, which may include multiple choice, completion, matching, diagrams, definitions, and short essay type questions. Multiple choice questions need to be answered on a scantron. Scantrons/pencils will not be provided; it is the student's responsibility to have these on the day of exams.

**Each regular lecture exam** accounts for **22 %** of your grade. Out of the four *regular* lecture exams, one exam grade will be dropped. If you take all of these four exams, your lowest grade automatically becomes your drop grade. If you miss an exam it automatically becomes your drop exam. If you miss a second exam, you will receive a grade of 0% for that exam.

### **Compulsory Comprehensive Final Lecture Exam (10%):**

The comprehensive final exam is mandatory and cannot be one of your dropped grades.

### **Mastering Online Homework (12%)**

Online homework assignments will be given through Pearson mastering. Homework will be due before each lecture exam. Check Pearson Mastering or syllabus for due dates. Please Note: You can have temporary free access to the Mastering site from the first day of class. **However, after ~ 2 weeks, if you do not purchase and enter an access code, your work will be lost (Even if you have completed all assignments!!!)**

### **In class Course Activities and Group Project(s) (12%).**

Students must be present and actively engaged in the lecture and must contribute fully to individual and

group activities. More details on activities and projects will be given in class.

### Testing Summary

3 out of 4 exams; 22 % each for a total of	66 %
Comprehensive Departmental Final	10 %
Mastering Online Homework	12 %
In class Course activities/Group project(s)	<u>12 %</u>
<b>TOTAL</b>	<b>100%</b>

### HCC grading scale:

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
F= 59 and below	0 points per semester hour
W(Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour

To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grade “I” does not affect GPA

### INSTITUTIONAL/STATE POLICIES

#### WE CARE!

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students (**Jason Wilson, Dean Student Development, Central College, 713.718.8084** [Jason.wilson@hccs.edu](mailto:Jason.wilson@hccs.edu)) for support. Furthermore, please notify the professor if you are comfortable in doing so. For food help, please also see, <http://www.hccs.edu/applying-and-paying/financial-aid/food-scholarship/> for more information.

#### EGLS<sub>3</sub>: 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. Go to <http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/> for more information.

#### 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 grade 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 (**Nov 2 by 4.30 pm for regular term**) in order to receive a “W” on a transcript. 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” or “Fx” 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**

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 will include but is not limited to 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 student 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/>

### **HCC POLICY STATEMENT: SEXUAL MISCONDUCT**

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  
Houston, TX 77266-7517 or [Institutional.Equity@hccs.edu](mailto:Institutional.Equity@hccs.edu) (713) 718-8271

### **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.

### **STUDENT SERVICES POLICIES**

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

### **TIPS FOR STUDENT SUCCESS!**

1. **Attend your Awesome Supplemental Instructor, Van Phan's Review sessions!**
2. Form a study group
3. Read the chapters before coming to class and again after class is complete. Stay ahead of the material from the beginning!
4. Review, review, review! Your course has resources from the publisher, including glossary of terms, quizzes and many interactive exercises. **Test yourself on a regular basis!**
5. It will be very helpful to define and summarize important terms and concepts using **hand written** flashcards, concept maps, diagrams and summaries in your own words.
6. The college has a Biology Computer Lab for tutorials and classroom assignments.
7. Take advantage of the HCC Central College tutoring service available to you at no cost: Learning Emporium: SJ 384; 7 am - 6 pm M—TH; 8 am - 4 pm Friday. Phone: 46356. Call to see exact times Biology tutor will be available-schedule should be ready close to the start of the semester. If needed, see the tutor early, not the day before the exam. For HCC online and face-to-face Tutoring, Please Go To <http://ctle3.hccs.edu/alltutoring/>

### **IMPORTANT DATES**

Sept 3	Labor Day Holiday (No Class)
Sept 10	Official Date of Record (Census): Note HCC will drop you from the class if you have not attended by this date
Nov 2 by 4.30 pm	Last Day for Administrative/Student Withdrawal (4.30 PM)
Dec 16	Semester ends

### **DISCLAIMOR**

It is your responsibility to read the syllabus in its entirety by the second class period and contact the Instructor if you have any questions and/or need clarifications.