

**HOUSTON COMMUNITY COLLEGE-SOUTHEAST COLLEGE  
SYLLABUS – INTRODUCTORY BIOLOGY I (Biology 1407) FALL 2018**

INSTRUCTOR: DR. BRIAN JORDAN

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Course Title: Biol. 1407 – Biology II (For Science Majors)

CRN: 15049

Credit Hours: 4

Class Time: Saturday: 8:00 am – 10:50 am (Lecture); 11:20 am – 2:20 pm (Lab)

Textbook: Campbell Biology in Focus, 2<sup>nd</sup> Edition, Urry, Cain, Wasserman, Minorsky, Reece

**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)**

Course Description: 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. 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!

**STUDENT LEARNING OUTCOMES**

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.

**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:** BIOL 1406 or equivalent General Biology I course for Majors Biology.

**Co-requisites:** None Required

**Material:**

**Textbook:** Valuepack

**BIOL 14067 Title:** "Campbell Biology in Focus, Volume 2 with Modified MasteringBiology Package for Houston Community College, 1/e Pearson. ISBN: 1323751440 // 9781323751442

**Required Laboratory Manual: \*\*\*\* Please note: the first Lab Manual listed below is used at HCC Central and Southeast Campuses. The second Lab manual is used at HCC Northeast, Northwest and Southwest-Only include the lab manual details for your campus!**

- 1) General Biology 2 Lab Manual - A Hands-on Experience, 3rd edition, ed by Jyoti Wagle & Marsha Turell, 2018, Hayden-McNeil. ISBN: 978-1-5339-0842-1
- 2) Biology 1407 Laboratory Manual, 4th Edition by David Schwartz, and Ndu Dikeocha, as contributing authors. Blue Door Publishing, 2015, ISBN: 978-1-68135-062-2

**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/>

**\*\*\*\* Only include statement below if you have taken the Canvas training, have received a Canvas shell for your course and updated it with the class material.**

**CANVAS:** Assignments may be posted online on Eagle online CANVAS found at the following link: [eagleonline.hccs.edu](http://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:**

**Biology Lab Review Pages:** <http://ctle.hccs.edu/biologylabs/index.html> You will get access to digital images, animations, and labeling exercises to review models, slides, and experiments that we cover in lab.

**STEM Website for students:** [www.hccs.edu/district/students/stem](http://www.hccs.edu/district/students/stem) Great information

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

**Tutoring:** <https://hccs.upswing.io/> 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. **(Note: Fill in the lab schedule based on which lab manual you are using)**

Note: The Instructor reserves the right to modify the schedule, including exam dates. Students will be advised of any changes as soon as possible.

### Course Calendar

Week	Date	(Sat.) 8:00 am - 10:25 am	(Sat.) 11:20 am – 2:20 pm
1	9/1	Ch 19. Descent with Modification	Ch. 20 Phylogeny
2	9/8	Ch. 24 Early Life and the Diversification of Prokaryotes	Lab Exercise # 1 and 2 Ch. 25 (Intro) The Origin and Diversification of Eukaryotes
3	9/15	Ch. 25 (conti.) The Origin and Diversification of Eukaryotes Ch. 26 The Colonization of Land	Lab Exercise # 3 and 4 Ch. 27 (Intro) The Rise of Animal Diversity
4	9/22	Ch.27 (conti.) The Rise of Animal Diversity	Lab Exercise # 5 Ch. 28 (Intro) Plant Structure and Growth
5	9/29	<b>LECTURE EXAM I</b> <b>Chapter 24, 25, 26</b>	Lab Exercise # 6 and 7
6	10/6	Ch. 28 (Conti.) Plant Structure and Growth	Lab Exercise # 8 Ch. 29 (Intro) Resources Acquisition, Nutrition, and Transport in Vascular Plants
7	10/13	Ch. 29 (Conti.) Resources Acquisition, Nutrition, and Transport in Vascular Plants Ch. 31 Plant Response to Internal and External Signals	<b>LAB EXAM I</b> (Lab Exercise 1-7)
8	10/20	<b>LECTURE EXAM II</b> <b>Chapters 27-29, 31</b>	Lab Exercise #9 and 10
9	10/27	Ch. 32 The Internal Environment of Animals: Organization and Regulation Ch. 33 Animal Nutrition	Lab Exercise #11 and 12

10	11/3	Ch. 34 Circulation and Gas Exchange Ch. 35 The immune System	Lab Exercise #13 and 14
11	11/10	<b>LECTURE EXAM III, Chapter 32-35</b>	Lab Exercise #15 and 16
12	11/17	Ch. 36 Reproduction and Development Ch. 37 Neurons, Synapses, and Signaling	Lab Exercise #17
13	11/24	<b>THANKSGIVING -HOLIDAY NO CLASS</b>	<b>THANKSGIVING -HOLIDAY NO CLASS</b>
14	12/01	Ch. 38 Nervous and Sensory System Ch. 39 Motor Mechanism and Behavior	<b>LAB EXAM II</b> (Lab Exercise 11– 16)
15	12/8	<b>LECTURE EXAM IV, Chapter 36-39</b>	Lab Exercise #18
16	12/15	<b>FINAL EXAM DEPARTMENTAL EXAM</b>	<b>FINAL EXAM DEPARTMENTAL EXAM</b>

Testing Category	Maximum Points	Your Points	
		Points Earned	Total Points Per Testing Category
Lecture Exam 1	100		-----
Lecture Exam 2	100		-----
Lecture Exam 3	100		-----
Lecture Exam 4	100		-----
Total of 3 Best Lecture Exam Points		300	
In-class assignment/Quizzes	100		
On-line Homework	100		
<b>Total points for Lecture Section</b>		<b>500</b>	
Lab Exam 1	100		
Lab Exam 2	100		
Lab Manuel	50		
<b>Total points of Lab Section</b>		<b>250</b>	
Lecture Final Exam (Departmental Exam)	100	<b>100</b>	
Total		<b>850</b>	
Final Grade =	<b>(your point/850) X 100 = Grade percentage</b>		

## **Disclaimer:**

Note: The Exam grades, quizzes, and on-line assignment percentage are subject to change base on the instructor demand to ensure the student have be given adequate amount of exam, quizzes and material to meet the academic requirements for the course.

## **INSTRUCTOR GUIDELINES AND POLICIES**

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**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.

**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!!

### **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 [www.hccs.edu/egls3](http://www.hccs.edu/egls3) for more information.

Please refer to **Student Handbook** for complete instructions and rules.

**GRADE DETERMINATION:** (Include breakdown of % or points for each graded items, such as lecture exams, lab exams, quizzes, projects, etc. Note this should include the departmental Final with an allocated 10% of the grade).

**LETTER GRADE ASSIGNMENT:**

**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  
AUD (Audit) .....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 6drop 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 <https://hccs.upswing.io/>

### **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>

### **Accommodations due to a qualified disability**

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including 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/>

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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 a 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 6drop 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.

### **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 postsecondary 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/ada-counselors/>

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

### **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/online/class-orientation--handbook/>

Access CE Policies on their Web site:

<http://www.hccs.edu/continuing-education/>

### **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/>

### **We Care**

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable him/her to provide any resources that she may possess.

### **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.

**IMPORTANT DATES:** (Add important dates such as holidays, official date of record, last day for withdrawal, final exams, etc.)

**DISCLAIMER:** 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.

Note: The Instructor reserves the right to modify the schedule, including exam dates. Students will be advised of any changes as soon as possible.