

# **Houston Community College**

# Course Syllabus Biology Non-Science Majors I (Biol 1308)

# **INSTRUCTOR CONTACT INFORMATION**

Instructor: Dr. Parker Office Phone: N/A

Office: HSB 401 Office Hours: By Appt.

E-Mail: Donald.Parker@hccs.edu

# **WELCOME TO**

Course Title: Introductory Biology I Semester & Year: Fall 2017

Course Prefix: BIOL 1308 Class Days & Times: M/W 8:00 - 9:20 a.m.

Course # 10337 Room # **304** 

Credit Hours: 3 Credit Hours

# **Course Description**

This course is designed to give the students the basic knowledge of life sciences. Topics include basic biological chemistry, cellular morphology, metabolism, Mendelian and molecular genetics.

Most of you will find the material is new to you. Please set aside adequate time for

Most of you will find the material is new to you. Please set aside adequate time f study - you will probably need to spend at least 6 hours per week!!!

# 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.

# **Student Learning Outcomes:**

- 1. Upon successful completion of this course, students will;
- 2. Distinguish between prokaryotic, eukaryotic, plant and animal cells, and identify major cell structures.
- 3. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
- 4. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
- 5. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze results.
- 6. Describe karyotyping, pedigrees, and biotechnology and provide an example of the uses of each.
- 7. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
- 8. Analyze evidence for evolution and natural selection.

# **Getting Ready**

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

Co-requisites: None

# Required Resources

• **TEXTBOOK: Campbell** Essential Biology with Physiology with Modified MasteringBiology Volume 1 Package for Houston Community College. ISBN: 1323751793 // 9781323751794

- ONLINE HOMEWORK AT PEARSON (HIGHLY RECOMMENDED): This is a web-based suite that develops adaptive learning content and applications, deploys that material to students and analyses how students learn from their responses to the material. This website requires an access code which comes packaged free with the new textbook or can be purchased online using credit card.
- Learning Web: Assignments may be posted on the Learning web found at the following link: http://learning.hccs.edu/faculty/
- Canvas Login (HIGHLY RECOMMENDED for In Person classes, REQUIRED for ONLINE CLASSES): https://hccs.instructure.com or eagleonline.hccs.edu. The main course content is on Canvas. You will use the standard textbook to study different topics required per the course curriculum recommended by the Texas Board of Higher Education and HCC course curriculum committee.

# LockDown Browser Requirement

This course requires the use of LockDown Browser for online exams. Watch this video to get a basic understanding of LockDown Browser:

https://www.respondus.com/products/lockdown-browser/student-movie.shtml

#### **Download Instructions**

Download and install LockDown Browser from this link:

# https://download.respondus.com/lockdown/download.php?id=355612798

#### Once Installed

- Start LockDown Browser
- Log into to Canvas
- Navigate to the quiz

Note: You won't be able to access a quiz that requires LockDown Browser with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

#### Guidelines

When taking an online quiz, follow these guidelines:

- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Turn off all mobile devices, phones, etc. and don't have them within reach
- Clear your area of all external materials books, papers, other computers, or devices
- Remain at your desk or workstation for the duration of the test
- LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

# **Getting Help**

Several resources are available if you encounter problems with LockDown Browser:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- HCC help desk number is 713-718-8800 if you need assistance. Some help desks want students to run the "System & Network Check" and the "Webcam Check" before they are contacted - and even, to forward the results of these checks at the time of opening a ticket.
- Respondus has a Knowledge Base available from support.respondus.com. Select the
  "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If
  your problem is with a webcam, select "Respondus Monitor" as your product
- If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it.

**LockDown Browser + Webcam Requirement** (For exams taken at home)
This course requires the use of LockDown Browser and a webcam for online exams taken at home.
The webcam can be the type that's built into your computer or one that plugs in with a USB cable.

Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature.

https://www.respondus.com/products/lockdown-browser/student-movie.shtml

# **Download Instructions**

Download and install LockDown Browser from this link:

https://download.respondus.com/lockdown/download.php?id=355612798

# Once Installed

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- Log into to Canvas
- Navigate to the quiz

Note: You won't be able to access a quiz that requires LockDown Browser with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

#### Guidelines

When taking an online guiz, follow these guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
  - Avoid wearing baseball caps or hats with brims
  - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
  - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
  - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

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  - If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it.

# Other Materials and resources:

Mastering Biology: www.pearsonmastering.com

**Biology Lab Review Pages:** <a href="http://ctle.hccs.edu/biologylabs/index.html">http://ctle.hccs.edu/biologylabs/index.html</a> 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:** 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.

Career Planning and Resources: Help with resume building and internships.

http://www.hccs.edu/district/students/career-planning/

# Attendance policy

You are expected to attend all lecture classes and labs regularly. 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.

# **Course Schedule**

Week	Dates	Chapters	Topics to be covered
1	8/27 & 29	1	Orientation, Introduction: Biology Today
2	9/3		Holiday: Labor Day
2	9/5 & 10	2, 3	Essential Chemistry for Biology, The molecules of life,

3	9/12/18		EXAM 1 from ch 1-3
4	9/17 & 19	4	A tour of the Cell
5	9/24 & 26	5	The Working Cell
6	10/1 & 3	6	Cellular Respiration, Obtaining energy from food
7	10/10/18		EXAM 2 from ch 4-6
8	10/15 & 17	7	Photosynthesis: Using Light to make food
9	10/22 & 24	8	Cellular Reproduction: Cells from Cells
10	10/29 & 31	9	Patterns of Inheritance
11	11/7/18		EXAM 3 from ch 7-9
12	11/12 & 14	10	The Structure and Function of DNA
13	11/19 & 21	11	How Genes are Controlled
14	11/26 & 28	12	DNA Technology
15	12/5 12/7	13	How Populations Evolve  EXAM 4 from ch 10-13
	12/12 8am		FINAL EXAM (on campus, testing centers, comprehensive)

# **Important Dates**

August 27	Classes Begin
September 3	Labor Day Holiday
September 10	Official Day of Record
September 12	Last day for 70% refund
September 28	Last day for 25% refund
November 2	Last Day for Administrative and Student Withdrawal (4:30pm)
November 22-25	Thanksgiving holiday

December 12 Final Exam
December 16 Semester Ends

# **Exams and Grading**

Please list your grading policies in detail. Below is a suggested grade distribution.

- Lecture exams (70% of the grade):
- Final Exam (10% of the grade):
- Mastering homework assignments (20% of the grade)

# **Instructor's Incomplete Policy**

The only circumstances under which you can get an I (incomplete) is if you are too ill to take the final. Once you receive an I, to get a grade for the course, you will have to complete the material by the end of the next full semester. If you do not, the I will convert to an F.

# **Course Repeater Policy**

Beginning in the Fall 2006, students who repeat a course for a third or more times will face significant tuition/fee increases at HCC and other Texas public colleges and universities. Please ask your instructor and/or counselor about opportunities for tutoring/other assistance prior to considering course withdrawal or if you are not receiving passing grades.

# **HCC Course Withdrawal Policy**

Beginning Fall 2007, the State of Texas imposes penalties on students who drop courses excessively. Students are limited to no more than SIX total course withdrawals throughout their educational career at a Texas public college or university.

To help you avoid having to drop/withdraw from any class, contact your DE professor regarding your academic performance. You may also want to contact your DE counselor to learn about helpful HCC resources (e.g. online tutoring, child care, financial aid, job placement, etc.).

# **HOW TO DROP**

- If a student decides to drop or withdraw from a class upon careful review of other options, the student can drop online prior to the deadline through their HCC Student Center.
- HCC counselors and/or instructors may drop students for excessive absences without notification (see Class Attendance below).
- Students should check HCC's Academic Calendar by Term for drop/withdrawal dates and deadlines.
- To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor will "alert" you and counselors that you might fail a class because of excessive absences and/or poor academic performance. You should visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring,

child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

# 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, 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 division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

# **International Students**

Receiving a W in a course may affect the status of your student Visa. Once a W is given for the course, it will not be changed to an F because of the visa consideration. Since January 1, 2003, International Students are restricted in the number of distance education courses that they may take during each semester. ONLY ONE online/distance education class may be counted towards the enrollment requirement for International Students per semester. Please contact the International Student Office at 713-718-8520 if you have any questions about your visa status and other transfer issues.

# **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.

# 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. 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.

# **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/

#### 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.

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

Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students' rights with regard to sex/gender discrimination. Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations.

Log in to: <a href="https://www.edurisksolutions.org">www.edurisksolutions.org</a> . Sign in using your HCC student e-mail account, then go to the button at the top right that says **Login** and enter your student number.