

BSC 2010C - Honors General Biology - Spring 2021

Remote Instruction via *Zoom* - Section 202 MWF 11:30 am – 12:20 pm
Face to Face Lab - Section 212: Tues 9:00 – 11:20 am (BIO206/BIO211)

4 credit hours (3,3)

Honors Biology lectures are taught synchronously as live Zoom meetings that require participation in iClicker Reef polling. Weekly Laboratory exercises and quizzes are held F2F. Lecture Exams are held F2F in the lab.

Instructor: Dr. Cynthia Bayer

Email: *Webcourses Inbox*

Graduate Teaching Assistant: Paul

Undergraduate Teaching Assistant: Elise

Zoom Office Hour: W 2:00-3:00 pm

Zoom Office Hour: F 12:30-1:30 pm

Zoom Office Hour: R 10:00-11:00 am

Zoom Office Hour: M 2:00-3:00 pm

Course Description: This course introduces the study of living organisms, preparing students with the foundational concepts to advance to upper-level Biology courses. Basic principles of the chemistry, molecules, and organelles of life will be covered, emphasizing structure-function relationships. Students will learn about the inheritance and molecular nature of genetic information and the influence of the environment on evolutionary change. Laboratory sessions provide opportunities for hands-on exploration of biological materials and processes.

Online learning: Due to the requirement for this course to be taught remotely, you will be expected to have daily access to the internet and email. Lectures will be delivered as live *Zoom* meetings. Online lecture quizzes, worksheets, and MasteringBiology homework will be assigned in Webcourses. Any updates, changes and reminders will be communicated to you via course email, lecture or Announcements. All students at UCF are required to obtain a [Knight's Email account](#) and check it regularly for official university communications. If you do not own a computer, computers connected to the internet are available in all UCF's computer labs. For further information on computer labs, please see guides.ucf.edu.

Online learning requires planning and self-pacing so that you may be successful in my course. I recommend treating this course like you would a fully F2F course. Students should plan to spend **12 hours per week** attending *Zoom* lectures, reading textbook assignments, completing homework and quiz assignments, summarizing notes, and participating F2F in laboratory exercises. Please do not be tempted to skip a week of lectures or lab and expect to catch up easily.

Student Learning Outcomes: Successful students will demonstrate a broad understanding of the basic principles of biology, demonstrate an ability to apply information to new scenarios, and be able to draw connections between concepts. Students will be expected to demonstrate understanding of:

- basic principles of the chemistry of life
- sub-cellular structures and their functions in the cell
- the flow of energy in cellular respiration and photosynthesis
- application of Mendelian laws of inheritance
- the molecular nature, replication, and expression of genetic information
- evolutionary principles as the foundation underlying all aspects of biology
- *In the Laboratory:* Students will participate in experiments and demonstrations to visualize, manipulate, quantify, and investigate biological questions.

Students will be evaluated on meeting these objectives via participation in iClicker Reef polling sessions during *Zoom* lectures, homework, quizzes, worksheets, lecture exams, and participation in laboratory exercises.

Course Prerequisites: Permission of Honors College

Academic Activity:

- To meet the registrar's requirement for documentation of your participation in this course, please complete the **Syllabus Quiz**, found in our Webcourse Quiz section, by **5:00 pm Friday, Jan 15**. Failure to do so will result in a delay in the disbursement of your financial aid.
- All students will receive credit for completion of the Course Expectations/Syllabus Quiz.

Course website: Access our course website at Webcourses@UCF via the myUCF portal using your NID and password. You will find links to the **Syllabus, Weekly Modules, MasteringBiology, Lecture PowerPoints, Lab Exercises, Group Worksheets, Web Resources, Grades, Online Quizzes**, and **Zoom** links.

Communication via *Inbox*:

- Please contact me via Webcourses *Inbox*. Emails sent to my UCF address will not be answered.
- Compose a clear and succinct email message, including your name and course.
- I will refer your question to the Syllabus or Announcement if it is already answered there.
- I will carve out time once per weekday to answer emails and attempt to answer your message within 24 h.

REQUIRED:

- *MasteringBiology** with Pearson eText *Campbell BIOLOGY, 11th Edition*.
- Lab Notebook: 3-ring binder to store Laboratory Exercises downloaded from Webcourses
- *iClicker Reef* subscription - for graded participation

* *MasteringBiology* is an on-line resource from textbook publisher Pearson that includes the *Campbell BIOLOGY* eText, practice tests, videos, animations, and other study aids. Modules will be assigned as graded **homework**. Instructions for purchasing access to MasteringBiology and **UCF First Day Opt-In** are available at the **Course Introduction & Getting Started** page. *Google Chrome* is the recommended browser to access *MasteringBiology* course materials.

***iClicker Reef*:** I will use *iClicker Reef* polling daily in *Zoom* for course points. You are required to participate with the *iClicker Reef* app on a smartphone, tablet, or laptop. See the link on our Webcourses homepage to create an *iClicker Reef* account by **Fri, Jan 22**.

Course Grade: You receive one grade for this **4-credit** course based on your combined lecture & lab grades.

60% = Best 4 out of 5 exams (100 points/exam x 4 exams)

15% = Laboratory (participation, lab notebook, weekly quizzes)

15% = Assessments (lecture quizzes, worksheets, MasteringBiology homework)

10% = *iClicker Reef* points

Letter grades for the semester will be awarded using the following scale:

<u>Grade range %</u>	<u>Letter Grade</u>	<u>GPA</u>
90 - 100	A	4.0
87 - 89	A-	3.75
84 - 86	B+	3.25
80 - 83	B	3.0
77 - 79	B-	2.75
74 - 76	C+	2.25
70 - 73	C	2.0
67 - 69	C-	1.75
64 - 66	D+	1.25
60 - 63	D	1.0
below 60	F	0

Course Exams: 4 lecture exams plus a COMPREHENSIVE **online** final exam are each worth 100 points. All exams will be based on BOTH lecture material, assigned readings, homework and the laboratory exercises. The lowest score of all 5 exams will be dropped automatically. The score of the Final exam will be dropped if it turns out to be the lowest of your scores, or you may choose to not take the Final exam. *All 4 lecture exams will be held F2F in the lab BIO206/BIO211 Tuesdays at 10:00 am according to the course schedule defined in the syllabus and Weekly Modules. The online Final Exam will be held according to the UCF Final Exam Schedule Wed, April 28 at 10:00 am.*

Taking F2F Lecture Exams:

- Plan to be seated in your designated lab room BIO206 or BIO211 prior to 10:00 am on the exam day.
- If you arrive late to an exam, you must turn in the exam paper at the scheduled end of the exam period. You will not be allowed extra time unless a documentable emergency has occurred.
- Lecture exams will consist of ~75% multiple choice and ~25% short answer questions.

Taking Online Final Exam:

- The Final exam will be available in the Webcourses Quizzes tool Wed, April 28 at 10:00 am.
 - The exam is available ONLY at 10:00 am and will be timed.
 - All exam questions will be multiple choice.
 - You will see 1 question at a time and will not be able to change your answer once you move to the next question. You will not be permitted to view the previous question.
 - Students are not allowed to use assistance from another person, GroupMe, WhatsApp, Chegg Study, Google, or any other website while taking an online exam. (Discussed in greater detail in the **Academic Integrity** section below.)
 - Quiz Log Auditing will be used for all online exams and quizzes.

Excused Missed Exams:

- If an exam is missed due to an official, documented, University-accepted absence, a makeup exam will be permitted. Excused absences include official UCF business at which your presence is required, U.S. Military-related business (e.g., Reserve Duty), legal obligation (e.g., jury duty).
 - You must provide to me documentation **1 week prior** to the scheduled exam date.
 - A make-up exam will be arranged at a mutually convenient time.
- A makeup exam **may** be permitted if any other legitimate* documented reason that circumstances beyond your control, an EMERGENCY, prevented you from taking the scheduled exam (including, but not limited to, your hospitalization or a death in your immediate family)
 - *Official documentation from an appropriate authority* (doctor, police, judge, etc.) must be **provided within 24 hours of the missed exam**, *A doctor's note must be written on letterhead paper with a date and contact phone number and must indicate that a medical condition was treated or that a medical procedure or hospitalization occurred.
 - *If I approve your excuse*, I will arrange a time for a make-up exam on the last day of class.
- If a student is permitted to take a makeup exam, they will **not** be permitted to take a makeup for a second exam later in the semester.

Unexcused Missed Exams: If a student misses an exam for an unexcused event (e.g., forgetting there was an exam, vacations, family gatherings or weddings) or *cannot provide acceptable documentation*, then they will receive a score of zero for that exam. The first zero score will be dropped as the lowest scoring exam. Any additional zero exam scores due to unexcused absences will count towards the final course grade.

Reviewing Exams: Grades will be posted at our Webcourses site. Exams will not be returned but will be available for review during the following lab session.

Online Quiz, Worksheet & MasteringBiology assignments: Students will not be granted any due date extension or make up for missing any of these online assignments.

Extra Credit: You can earn up to 20 points of Extra Credit to be added to the Exam portion of your grade by submitting a Report on a *Science magazine* Journal research article or review. More information is on our Webcourses site.

iClicker Reef points are earned from *Zoom* class participation and graded questions. Each day, 3 points are earned for participation (= answering at least 75% of the questions) plus additional points for graded questions (1 point for each correct answer and 0.25 point for each incorrect answer). Only a subset of questions will be graded each day. The two lowest iClicker day scores will be dropped automatically.

Zoom Lectures and Office hours: Please take the time to familiarize yourself with *Zoom* by visiting the [UCF Zoom Guides](#). You may choose to use *Zoom* on your mobile device (phone or tablet). Meeting dates and times will be scheduled through Webcourses and should appear on your calendar. *Zoom* Lectures will be recorded and posted in Webcourses.

- Find the scheduled meeting invitation at the *Zoom* tab in our Webcourse.
 - Join the meeting on time. Participants may be placed in a waiting room and permitted entry only during the first few minutes of the meeting to prevent unauthorized participants from joining.
 - By joining a *Zoom* meeting, you agree to be audio- and video-recorded.
 - Remember to keep your microphone muted unless asking or responding to a question.
 - Practice patience.
 - Anyone who violates UCF rules of conduct will be removed from the meeting.
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Academic Integrity:

As reflected in the UCF creed, integrity and scholarship are core values that should guide our conduct and decisions as members of the UCF community. Plagiarism and cheating contradict these values and are serious academic offenses. Students enrolled at UCF are expected to familiarize themselves and follow the University's *Rules of Conduct* (Section UCF-5.008) in the Golden Rule handbook <http://goldenrule.sdes.ucf.edu>.

Students are prohibited from engaging in **Academic Misconduct:**

- a) Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
- b) Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.
- c) Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
- d) Falsifying or misrepresenting the student's own academic work.
- e) Plagiarism: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.
- f) Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
- g) Helping another violate academic behavior standards.

- h) Soliciting assistance with academic coursework and/or degree requirements. The solicitation of assistance with an assignment, lab, quiz, test, paper, etc., without authorization of the instructor of record or designee is prohibited. This includes but is not limited to asking for answers to a quiz, trading answers, or offering to pay another to complete an assignment. It is considered Academic Misconduct to solicit assistance with academic coursework and/or degree requirements, even if the solicitation did not yield actual assistance (for example, if there was no response to the solicitation).

Responses to Academic Dishonesty, Plagiarism, or Cheating: Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, *The Golden Rule* handbook <http://goldenrule.sdes.ucf.edu>. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and respond to academic misconduct when necessary. Penalties for violating rules, policies, and instructions within this course can range from a zero on the exercise to an "F" letter grade in the course. In addition, an Academic Misconduct report could be filed with the Student Conduct and Academic Integrity <https://scai.sdes.ucf.edu> which could lead to disciplinary warning, disciplinary probation, or deferred suspension or separation from the University through suspension, dismissal, or expulsion with the addition of a "Z" designation on one's transcript.

Being found in violation of academic conduct standards could result in a student having to disclose such behavior on a graduate school application, being removed from a leadership position within a student organization, the recipient of scholarships, participation in University activities such as study abroad, internships, etc.

Honors students of course can avoid all of this by demonstrating values of honesty, trust, and integrity. No grade is worth compromising your integrity and moving your moral compass. Stay true to doing the right thing: take the zero, not a shortcut.

Time commitment: For most students striving for A grades, I recommend scheduling 12 hours per week for engaging with this course. Your background knowledge/experience and other variables may require you to spend additional time. Please plan accordingly by scheduling time on your calendar now. Several factors influence student academic performance and long-term learning. Active engagement in all course activities (e.g., *Zoom* lecture, *iClicker Reef* polling, textbook readings, *MasteringBiology* homework, group worksheets, reviewing) will contribute to your learning and to success in this course.

Course Accessibility: It is my goal that this class be an accessible and welcoming experience for all students, including those with disabilities that may impact learning in this class. If anyone believes the design of this course poses barriers to effectively participating and/or demonstrating learning in this course, please meet with me (with or without a Student Accessibility Services (SAS) accommodation letter) to discuss reasonable options or adjustments. You may also want to contact SAS <http://sas.sdes.ucf.edu> (Ferrell Commons 185; 407-823-2371) to talk about academic accommodations.

Help & SARC: Please ask for help if you need it! I am here to answer your questions. Additionally, help is available through SARC (Student Academic Resource Center, Howard Phillips Hall, Room 113; 407-823-5130; <http://www.sarc.sdes.ucf.edu>). SARC provides students with free individual and small-group tutoring for Biology 2010 and Supplemental Instruction (SI). Students can also request a Learning Consultation with a Learning Skills Specialist or attend Academic Success Workshops to improve study skills & strategies.

Deployed Active-Duty Military Students: Students who are deployed active-duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

UCF Cares: UCF and I care not only about your academic success, but also your overall well-being. Please visit UCFcares.com <http://cares.sdes.ucf.edu/> if you are seeking resources or support, or if you are worried about a friend or classmate. Free services and information are included for a variety of student concerns, including but not limited to alcohol use, bias incidents, mental health concerns, sexual harassment or assault, and financial challenges. You can also e-mail ucfcares@ucf.edu with questions or for additional assistance. You can reach a UCF Cares staff member Student Care Services, <http://scs.sdes.ucf.edu>, Ferrell Commons 142, between 8 a.m. and 5 p.m. by calling 407-823-5607.

If you are in immediate distress, please call Counseling and Psychological Services (CAPS), Counseling Center 101 <http://caps.sdes.ucf.edu> to speak directly with a counselor 24/7 at 407-823-2811 or call 911.

Academic Services and Resources: A list of available academic support and learning services is available at [UCF Student Services](#). Click on "Academic Support and Learning Services" on right-hand side to filter.

Non-Academic Services and Resources: A list of non-academic support and services is also available at [UCF Student Services](#). Click on "Support" on the right-hand side to filter.

Campus Safety Statement: Emergencies on campus are rare, but everyone should be aware of their surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
 - Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide's physical location and consider reviewing the online version at http://emergency.ucf.edu/emergency_guide.html.
 - Familiarize yourself with evacuation routes from each of your classrooms and have a plan for finding safety in case of an emergency.
 - If there is a medical emergency during class, a first aid kit or AED (Automated External Defibrillator) may be required. To learn where those items are located in any building, see <http://www.ehs.ucf.edu/AEDlocations-UCF>
 - To stay informed about emergency situations, sign up to receive UCF text alerts by going to my.ucf.edu and logging in. Click on "Student Self Service" located on the left side of the screen in the tool bar, scroll down to the blue "Personal Information" heading on your Student Center screen, click on "UCF Alert", fill out the information, including your e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."
 - Consider viewing this video [You CAN survive an active shooter](#) about how to manage an active shooter situation on campus or elsewhere.
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COVID-19:

To protect members of our community, everyone is required to wear a facial covering inside all common spaces (<https://policies.ucf.edu/documents/PolicyEmergencyCOVIDReturnPolicy.pdf>).

COVID-19 and Illness Notification – Students who believe they may have a COVID-19 diagnosis should contact UCF Student Health Services (407-823-2509) so proper contact tracing procedures can take place.

Students should not come to campus if they are ill, are experiencing any symptoms of COVID-19, have tested positive for COVID, or if anyone living in their residence has tested positive or is sick with COVID-19 symptoms. CDC guidance for COVID-19 symptoms is located here: (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>)

In Case of Faculty Illness – If the instructor falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in Webcourses@UCF or Knights email for any alterations to this course.

Zoom Lecture Dates**Face-2-Face Lab Exercise / EXAM**

Jan 11: *Course introduction*

Jan 13: Chapter 1 - *Life*

Jan 15: Chapter 2 - *Chemical Context*

ADD/DROP deadline Fri, Jan 15 at 11:59 pm

Jan 18: **MLK Holiday**

Jan 20: Chapter 2/3 - *Water*

Jan 22: Chapter 3

Lab 1. *Daphnia* Heart Rate

Jan 25: Chapter 4 - *Carbon*

Jan 27: Chapter 4/5 - *Large Biomolecules*

* Jan 29: Chapter 5

Lab 2. Solutions/Dilutions/Spectrophotometry

Feb 01: Chapter 5

Feb 03: Chapter 6 - *The Cell*

Feb 05: Chapters 6

EXAM 1 (Chapt 1 – 5)

Feb 08: Chapter 6/7 - *Membranes*

Feb 10: Chapter 7

Feb 12: Chapter 8 - *Metabolism*

Lab 3. Standard Curve & Electrophoresis I

Feb 15: Chapter 8

Feb 17: Chapter 9 - *Cellular Respiration*

* Feb 19: Chapter 9

Lab 4. Electrophoresis II

Feb 22: Chapter 9

Feb 24: Chapter 10 - *Photosynthesis*

Feb 26: Chapter 10

EXAM 2 (Chap 6 – 9) & Lab Notebook check

Mar 01: Chapter 12 - *Cell Cycle & Mitosis*

Mar 03: Chapter 12

Mar 05: Chapter 13 - *Meiosis*

Lab 5. Cell Cycle & Mitosis

Mar 08: Chapter 13

Mar 10: Chapter 14 - *Mendel and the Gene Idea*

* Mar 12: Chapter 14

Lab 6. *Drosophila* Genetics

Mar 15: Problems 14

Mar 17: Chapter 15 - *Chromosomal Inheritance*

Mar 19: Chapter 15

EXAM 3 (Chapt 10 – 14)

Mar 22: Problems 15

Mar 24: Chapter 16 - *Molecular Basis of Inheritance*

Mar 26: Chapter 16

Lab 7. Human Phenotypes

Mar 29: Chapter 17 - *From Gene to Protein*

Mar 31: Chapter 17

* Apr 02: Problems 16/17

Lab 8. Modeling Transcription/Translation

Apr 05: Finish Lab notebook

Apr 07: Chapter 19 - *Viruses*

Apr 09: Chapter 19

EXAM 4 (Chapt 15 – 17) & Lab Notebook check

Apr 11-18: **Spring Break**

Apr 19: Chapter 22 - *Descent with Modification* Lab 9. Virtual – TBD

Apr 21: Chapter 22

Apr 23: Chapter 23 - *Evolution of Populations & Practice On-line Final*

Apr 26: Last day of classes

Apr 28: *On-line Comprehensive Final Exam* (10:00 am – 12:50 pm)

* *Due date for optional Extra Credit report*

Laboratories: The labs are an integral part of this course and students are required to attend ALL laboratory sessions in the Biology Building (BIO 211/BIO 206). More than one unexcused laboratory absence will result in 0/100 points for the laboratory portion of your grade (i.e., you are allowed **one and only one** unexcused absence, and you will receive a "0" for that lab). Laboratory sessions cannot be made up. If you have a valid, documented reason for missing a laboratory session (from doctor, police, judge, official UCF business, etc.), you must contact me within 24 hours of the start of the lab. Attendance will be taken at the beginning of each lab. It is advisable to wear old clothes to lab. **Closed-toe shoes** are required by OSHA regulations. After the first week, if you are not wearing closed-toe shoes you will be asked to leave, and an unexcused absence will be recorded. There will be no smoking, eating or drinking in the laboratory. See also: **UCF Covid-19 Lab Policy**. [Print the Lab Exercises posted on Webcourses@UCF to bring to each laboratory session and store in Lab Notebook binder for grading.](#)

The Laboratory component of the course is worth 15% of your course grade.

36 points - Laboratory notebook

32 points – Weekly Quizzes

32 points – Participation

The instructor reserves the right to make changes to the syllabus or other course features at any time.