

## BSC 2010 – Integrated Principles of Biology I – Spring 2023

### Class Meetings

Class Number 11255: M,W,F | Period 2 (8:30 AM - 9:20 AM) Room: McCarty C 100  
Class Number 11270: M,W,F | Period 3 (9:35 AM - 10:25 AM) Room: McCarty C 100  
Class Number 11269: M,W,F | Period 6 (12:50 PM - 1:40 PM) Room: Carleton 100  
Class Number 19928(Honors): M,W,F | Period 3 (9:35 AM - 10:25 AM) Room: McCarty C 100  
F | Period 4 (10:40 AM - 11:30 AM) Room: Weimer 2056  
Class Number 19930(Honors): M,W,F | Period 6 (12:50 PM - 1:40 PM) Room: Carleton 100  
F | Period 7 (1:55 PM - 2:45 PM) Room: Keene-Flint 0119

### Instructors

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### Expectations

Each student is solely responsible for reading and following the instructions, guidelines, and schedules in this syllabus and on the course webpage, or announced in class. Not having read the information in this syllabus or in instructor announcements will not constitute an excuse for missing an assignment, exam, or other assessment. **Please set your preferences in Canvas so that you receive timely notifications of course announcements and other information.**

### Course Resources

BSC Laboratory Courses

The BSC laboratory courses (BSC 2010L and BSC 2011L) are managed separately from the lecture courses. Please see the BSC Website (<http://www.bsc.ufl.edu>) for more information on the laboratory courses.

## Textbook & Online Resources/Homework

### A. Textbook

*Principles of Life*, 3<sup>rd</sup> Edition, by Hillis, Price, Hill, Hall, & Laskowski  
W.H. Freeman (publisher)

### B. Online Resources/Homework

*Achieve* is an online assignments and tutorial system from the textbook publisher. It is required for this course and includes an ebook with purchase. Each new copy of *the Principles of Life* textbook comes automatically packaged with *Achieve*. If you purchase a used textbook you will still need to purchase access to *Achieve*. **You are required to have access to *Achieve* for the ENTIRE course. It is your responsibility to ensure that your access DOES NOT expire before the end of the semester.**

Instructions on correctly registering for *Achieve* will be available on the Canvas course site once the semester has started. Please wait for these instructions **before** registering for *Achieve*; incorrect registration on *Achieve* may result in receiving zero points for all *Achieve* assignments.

### C. Purchase of Textbook and Achieve Access

Please note that this course participates in the UF All Access program. Students will have a few options to gain access to the textbook and *Achieve* for *Principles of Life* when classes begin:

- **Option 1 - RECOMMENDED** - Students will have the choice to “opt-in” for a limited time to receive access to *Achieve* for a reduced price and pay for these materials through their student account. The following link will take you to where you can “opt-in” to receive discounted course materials once logged in with your Gatorlink credentials: <https://www.bsd.ufl.edu/AllAccess/OptIn>
- **Option 2** – Purchase a standalone code through the UF Bookstore. Both options provide access to the same materials.

There are also current versions of the textbook on reserve at the Marston Science Library. Visit the Reserve Materials area to check out these copies. You will still need to purchase *Achieve*.

### D. Classroom Response System

We will use the Learning Catalytics (LC) Classroom Response System (CRS) for quiz questions during class (<https://learningcatalytics.com/>). LC allows students to use a laptop, tablet, or smartphone to participate in class.

Cost:

6 month access: \$12

12 month access: \$20

**Option 2** – If you “opt-in” to receive access to *Achieve*, then the Learning Catalytics access code will be included.

### E. Course Website (Canvas)

Class material including the syllabus, discussion readings, and problem sets, exam results, some lecture slides and other information related to the course will be posted on the course Canvas website (<https://ufl.instructure.com/courses/471207>). You are responsible for **all** announcements made in lecture and/or posted on the course website for this class. For help with Canvas, call the UF Computing Help Desk at 352-392-4357, or visit the Canvas support website: <https://elearning.ufl.edu/student-help/>.

### F. Course Fees

## Principles of Life

THIRD EDITION



There is no additional course fee for BSC 2010.

### Course Communications

All email correspondence to course instructors must **originate from your ufl.edu account, have your full name in the body of the email, and contain your course and section number in the subject line**. Emails not meeting these requirements may not be recognized by our email filters, and thus may not be answered.

### Course Goals and Objectives

The primary goal of this course is to establish a coherent foundation of knowledge in biology and to prepare students for comprehension in advanced biology courses and science in general. Fundamental concepts discussed include the scientific methods by which we come to know things in science, the chemical composition and processes that make up all life, genetic processes and the means of inheritance of traits, the mechanisms and processes of natural selection, and adaptation and evolution of life on Earth. An additional course goal is to develop critical thinking skills for development of reasoned thought and for evaluation of life experiences.

Objectives of the course will be achieved if, by its conclusion, students can:

- Describe a scientific hypothesis and identify testable predictions that logically follow
- Compare and contrast the components of prokaryotic and eukaryotic cells and the molecular processes driving cellular structure and functions
- Outline the process and molecular components of key metabolic pathways
- Describe the relationship between genotype and phenotype
- Predict the RNA and protein sequences that will be transcribed and translated from a given gene
- Predict the immediate and long term effects of specific gene mutations
- Discuss the evidence that all living things are descended from a common ancestor and have changed and diversified into species through time
- Describe the primary mechanisms of evolutionary change
- Identify sources of genetic variation in populations and explain how this can be shaped in the presence of natural selection and other evolutionary forces
- Interpret and evaluate phylogenetic trees and use them to distinguish evolutionary predictions
- Outline major fundamental events in the history of life on Earth, including changes to biogeochemical cycles connected with major evolutionary transitions

### General Education Objectives for Biological Sciences

Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems. Students will formulate empirically testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

The General Education objectives and the associated Student Learning Outcomes for Biological Sciences are achieved through lectures, in class discussion, questions embedded in lectures, and online activities and exercises. The learning objectives and SLOs are further reinforced by inquiry-based and active-learning exercises in the companion laboratory course, BSC 2010L. In particular, the companion lab expands upon development and testing of specific hypotheses.

### General Education Student Learning Outcomes

The general education student learning outcomes (SLOs) describe the knowledge, skills and attitudes that students are expected to acquire while completing a general education course at the University of Florida. The SLOs fall into

three categories: **content**, **communication** and **critical thinking**. **Every general education course must address all three SLOs.** Note that the subject area objectives (detailed above) describe the context within which the SLOs are achieved

| Category                 | Institutional Definition  | Institutional SLO   |
|--------------------------|---|---|
| <b>CONTENT</b>           | Content is knowledge of the concepts, principles, terminology and methodologies used within the discipline.   | Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.  |
| <b>COMMUNICATION</b>     | Communication is the development and expression of ideas in written and oral forms.   | Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.                            |
| <b>CRITICAL THINKING</b> | Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion. | Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems. |

To assess student performance in meeting these student learning outcomes for this course, students are evaluated by a variety of instruments throughout the course: three exams during the semester, daily graded clicker questions used to assess comprehension and reasoning, and weekly graded online activities, assessments, and other Achieve assignments. Student Learning Outcomes are further assessed in BSC 2010L, the companion lab course. For example, the Communication SLO is assessed in graded written assessments and in oral presentations in the lab. In combination, BSC 2010 and BSC 2010L provide assessments of all categories of the General Education Student Learning Outcomes.

## Assessments and Grading

### 1. Exams

There will be three "midterm" exams, but no cumulative "final" exam. The midterm exams will be administered by assembly at the university established assembly exam times (8:20 pm). Your assembly exam room will be assigned to you at least 24 hours prior to the exam - please check the course Canvas site for more details. Each exam will cover material from lecture, the online discussions, and the assigned reading in the textbook. The exams will not be cumulative, however, concepts taught in this course build on each other. In order to do well on the exams you will need to remember and apply concepts covered in earlier units of this course. Each exam will be worth 20% of the course grade.

All exams will be multiple-choice and machine graded. Answer sheets will be provided and must be filled in using a #2 or a softer pencil. Each student must take the exam during their assigned exam time. Each student must bring their Gator ID to take the in-person exam. No student will be allowed to start an exam after the first student to complete an exam leaves the classroom.

All exams and answer sheets will be collected at the end of the exam period. No additional time will be given to complete an exam if you arrive late. Please be aware that filling in the scantron sheets is part of the exam; no extra time at the end of the exam period will be given for filling out the scantron sheets.

### A. Exam Curves

If necessary, exams MAY be curved using the following approach: The top 3% of the scores will be averaged, and the difference from 100 points will be added to each exam score.

### B. Post-Exam Review

Exams will be available for review by appointment for one week following the posting of exam scores on Canvas; specific times for exam review will be announced following each exam. Exams will not be available for review after the semester has ended.

### C. Make-up Exams

No make-up exams will be given without prior permission or documentation of illness. Students that will be missing an exam due to a pre-arranged university-approved excused absence (sports, etc.) should let the instructor know **a minimum of two weeks in advance**. In case of illness or personal emergency on exam day, students must submit documentation to the Dean of Students office (<https://care.dso.ufl.edu/instructor-notifications/>) and request an instructor notification to be sent. **These notes must be received within five business days after the exam.**

## 2. Online Assignments (*Achieve*)

As part of BSC 2010, you are required to complete online assignments administered through the Achieve site that will account for 15% of your overall grade (5% for each unit). The schedule with assignment due dates is at the end of this document. You are expected to work by yourself on the assignments and cheating will not be tolerated.

### A. Setting Up Your Account

**You must set up your Achieve account through Canvas. Please see the Canvas page in order to do this correctly. For instructions for Achieve registration, please see Canvas page *Achieve Registration Instructions*. You must use your Gatorlink (@ufl.edu) email address, which will be your username.** Using an email address other than your UFL email address will result in NO CREDIT received for assignments administered through Achieve. This cannot be changed after registration; be sure to register correctly.

**NOTE:** if you already purchased Achieve access in a different semester, you can log in using your existing username, which should be your Gatorlink email address. You will then be asked to provide your UFID number. If you have any questions or problems setting up your account, please contact Technical Support (point E, below). Technical support will need a technical support incident ID if you continue to have trouble, so be sure to save that ID when you report your issue.

### B. Grading of Online Exercises

There are several different types of assignments that students will have to complete:

- **Quizzes:** students will be graded based on the number of questions answered correctly out of the total number of questions on the FIRST quiz submission.
- **All other assignment types (activities, tutorials, etc.):** students will receive full credit upon completion.
- **Adaptive Quizzes:** students receive full credit upon mastery of the assignment

Your grades on assignments and their status (e.g., complete, or due in x days) can be viewed in Canvas. The Achieve home page is NOT a reliable way to determine which assignments remain to be completed. There are many other resources available on Achieve to help you study material from your textbook, such as Diagnostic quizzes, Flashcards, Interactive chapter summaries, etc. Items that are NOT listed in the Gradebook will not be graded, but we still strongly encourage you to use them to help you study.

### C. Important information about pace

Some assignments may have a set time limit, so make sure you have time to devote to that assignment before you begin. Once assigned, assignments are available online at all times, from the start of the given unit up until the deadline. It is especially important not to wait until just before the deadlines to complete Achieve assignments; problems usually happen at the last minute.

The assignments have been listed in an order that complements the lecture, and we recommend either going over the material for a given chapter:

- before the lecture, which may help you understand the lecture in greater detail, or
- after each lecture to help reinforce the material and prepare for the exam.

You can always go back and re-do the assignments after you have submitted them for a grade, as a study aid.

#### D. Due Dates

Note that all due dates for assignments are clearly posted in the Achieve Gradebook and Calendar and reflect the most up-to-date information. The deadline for assignments is 11:59 p.m. on the day stated on the lecture schedule. **All assignments must be completed by the stated due date and time for credit. There are NO make-ups available for Achieve assignments.**

Extensions for Achieve assignment sets will only occur in extreme circumstances. A [Dean of Students note](#) verifying documentation of illness or a personal matter must be provided for at least five of the seven days of the week of the assignment's deadline for accommodations to be considered.

**Extensions will NOT be given because of technical or personal issues that occur within 24 hours of the assignment deadline.**

#### E. Technical Issues

**For help with *Achieve* technical issues, contact MacMillan Technical Support:**

- Phone: 1 (800) 936-6899 (phone)
- Online support form: <https://macmillan.force.com/macmillanlearning/s/achieve>

Tech Support Hours

- Monday - Thursday 8am - 3am ET
- Friday 8am - 12am ET
- Saturday 12pm - 9pm ET
- Sunday 12pm - 3am ET

If there is a technical problem with accessing Achieve or a particular assignment within Achieve, you must contact MacMillan technical support **FIRST, at least 2 days before the deadline. MacMillan tech support is the only one who can fix technical issues with the site.** Then, contact the TA at least 2 days prior to the deadline, so appropriate steps can be taken to fix the issue.

### 3. Learning Catalytic Questions

Students will receive up to 25% of the total course points (8.33% for each unit) for participation in the daily clicker/discussion questions that are to be answered using the classroom response system (Learning Catalytics [LC]). Students may not make up LC questions, regardless of the reason (e.g., absence, malfunctioning cell phone, forgot to register, etc.). It is the student's responsibility to regularly check (i.e., daily or weekly) their sessions in LC to ensure that their submissions were correctly received, and to contact LC support to resolve any issues with submissions not being properly recorded in the LC gradebook.

#### A. Grading

The score earned will reflect the proportion of LC questions answered correctly in class. Each question posed will be scored as 0.75 LC points for a correct answer with an additional 0.25 LC points for participation. For each course lecture unit, the LC score is scaled to a max of 80% to buffer for occasional absences or technological issues. What this means is that if you earned at least 80% of the total available LC points, you received full credit for the course

score. If you earned less than 80% of the total LC points, your score is scaled out of 80%, and you received that proportion of the course score. For example, if you earned 60% of the LC points, your score in the Canvas gradebook would be  $0.6/0.80 = 75\%$ .

### B. Accommodations and Make-Ups

Accommodations for extended time on Learning Catalytics or use of accommodations for disability related absences requiring make-up of Learning Catalytics questions will be made only with the appropriate documentation from the DRC. These accommodations are required to be discussed with each faculty member before the beginning of each unit. Accommodations *cannot* be applied retroactively, i.e. at the end of the semester.

Make up of Learning Catalytics points will only occur in extreme circumstances. A [Dean of Students note](#) verifying documentation of illness or a personal matter causing absences for at least three days within a single unit must be received in order for accommodations to be considered. Even with such documentation, accommodation is not guaranteed.

### C. Setting Up Your Account

Instructions on how to create an account will be available on Canvas. **IMPORTANT: when creating your account, you must use your Gatorlink (@ufl.edu) e-mail address. Failing to do so will result in receiving NO CREDIT for LC units.**

You must use your Gatorlink ID for your “Student ID.” Example: If your e-mail address is albert@ufl.edu, use albert NOT your 8-digit numerical UF ID (e.g., 1234-5678). Your Student ID should be all lowercase, and be careful not to enter a space afterwards!

If the “Username” is already taken, you may add a few numbers to the end (e.g., albert123). Your “Student ID” must be your Gatorlink ID however.

### D. Technical Support

For problems with Learning Catalytics, contact Pearson 24/7 Technical Support:

- <https://support.pearson.com/getsupport/s/contactsupport>
- [https://help.pearsoncmg.com/learning\\_catalytics/student/en/Topics/lc\\_looking\\_for\\_help.htm](https://help.pearsoncmg.com/learning_catalytics/student/en/Topics/lc_looking_for_help.htm)
- 800-677-6337

## 4. Extra Credit

Each instructor will offer exactly 2 points of extra credit, which will apply to the appropriate exam, post curve. The same content and amount will be offered to all students. **There will be no extra credit tailored to individual students. There will be NO opportunities to make up extra credit.**

## 5. Grading Summary

| Assessment |        | Available Points | Weight |     |
|------------|--------|------------------|--------|-----|
| Exams      | Exam 1 | 100              | 20%    | 60% |
|            | Exam 2 | 100              | 20%    |     |
|            | Exam 3 | 100              | 20%    |     |
| Achieve    | Unit 1 | Variable         | 5%     | 15% |

|                                      |        |          |       |     |
|--------------------------------------|--------|----------|-------|-----|
|                                      | Unit 2 | Variable | 5%    |     |
|                                      | Unit 3 | Variable | 5%    |     |
| <b>Learning Catalytics Questions</b> | Unit 1 | Variable | 8.33% | 25% |
|                                      | Unit 2 | Variable | 8.33% |     |
|                                      | Unit 3 | Variable | 8.33% |     |

Those students enrolled in the honors sections of this course will receive points weighted as 10% of their overall grade from participation in an additional weekly discussion.

All grades will be posted on Canvas (in terms of course points, i.e., the point scheme above), and it is the responsibility of the student to check their grades on Canvas gradebook and make sure they match their grades on Achieve and LearningCatalytics. **If there is a discrepancy you must let us know within ONE week of the grade being posted on Canvas gradebook.**

Minimum grade cutoffs are listed below. Because each exam may be curved individually (see *Exam Curves* above), **the scores for the course as a whole will not be curved** (i.e. these grade cutoffs will not be lowered) except under extremely rare circumstances (i.e., unless we tell you otherwise these cutoffs will not be lowered, so do not ask). However, these cutoffs will not be raised; in other words, if you receive 90% of the possible points, you are guaranteed to earn an A grade. **Final scores will NOT be rounded** (i.e., 89.99% is not 90%).

| Point Range (%) | Letter Grade |
|-----------------|--------------|
| ≥ 90.00         | A            |
| ≥ 86.66         | A–           |
| ≥ 83.33         | B+           |
| ≥ 80.00         | B            |
| ≥ 76.66         | B–           |
| ≥ 73.33         | C+           |
| ≥ 70            | C            |
| ≥ 66.66         | C–           |
| ≥ 63.33         | D+           |
| ≥ 60            | D            |
| ≥ 56.66         | D–           |
| < 56.66         | E            |

Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>. A minimum grade of C is required for general education credit.

## 6. Special Treatment



Please do not request individual special treatment regarding grading at the end of the semester; **we do not adjust grades for individuals for any reason nor are grades “rounded up”**. Plan to do well on all exams and other assessments from the beginning of the semester; if you are having difficulty in the class, please let your instructors know *before* the exams rather than after.

## Other Considerations

### 1. Academic Honesty

All students registered at the University of Florida have agreed to comply with the following statement:

*“I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.”*

In addition, on all work submitted for credit the following pledge is either required or implied:

*“On my honor I have neither given nor received unauthorized aid in doing this assignment.”*

Any acts of cheating, plagiarism, or other forms of academic dishonesty will result in, at minimum, a 0 grade for the assignment, test, or quiz, and may include additional consequences up to and including a failing grade in the class. Sharing information about tests and quizzes with students who have not yet taken the exam or quiz, or posting on social media information about tests and quizzes that other students have not yet taken, is a serious act of academic dishonesty. If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Student Honor Code and Student Conduct Code at: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>.

### 2. Attendance/Participation

Students are expected to participate in all classes and are responsible for all material covered during the lecture, including announcements. Students are strongly encouraged to read the assigned chapters before coming to class as this will make it easier to comprehend the lecture material. If you miss class, visit the Canvas site for any lecture slides/notes and course announcements.

There are no points awarded for attendance directly. No credit will be retroactively awarded for unanswered Learning Catalytics quiz questions.

### 3. Netiquette and Communication Courtesy

All members of the class are expected to follow [rules of common courtesy](#) in all email messages, threaded discussions, and chats.

### 4. Time Commitment

The UF College of Liberal Arts and Sciences assumes that each student will devote 3-4 hours per week per credit-hour to each course, including time in lectures and labs. Because BSC 2010 is 3 credits, each student should therefore expect to devote 9-12 hours per week to this course during a regular semester, or 11-15 hours per week during the summer. A recommended time allocation is below.

| Activity         | Hours per Week |
|------------------|----------------|
| Lectures         | 3              |
| Achieve Homework | 1-2            |

Textbook Readings 2-3

Review and Study 2-4

If you find yourself spending more than the recommended number of hours per week on average on these activities, discuss this with your course instructor to see if you can refine your study habits. We encourage you to view the Study Skill Videos (<https://writing.ufl.edu/writing-studio/video-resources/study-skills/>). If you find yourself spending less than the recommended number of hours per week on average, you should recognize that you may have difficulty learning and comprehending the material in this time, and this will probably be reflected in poor performance on the various assessments, causing you to receive a lower overall course grade.

## 5. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Disability Resource Center, in 001 Reid Hall (phone: 352.392.8565). Please see the University of Florida Disability Resources website for more information at: <https://disability.ufl.edu/>. Note that the student should provide documentation of a requirement for accommodation **by the second week of classes**, or as soon as possible after any changes are made to their accommodations. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Disability Resource Center will work with the instructor to accommodate the student.

## 6. Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

## 7. Class Demeanor

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

Students are encouraged to employ critical thinking and to rely on data and verifiable sources to interrogate all assigned readings and subject matter in this course as a way of determining whether they agree with their classmates and/or their instructor. No lesson is intended to espouse, promote, advance, inculcate, or compel a particular feeling, perception, viewpoint, or belief.

## 8. In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class

lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

### Lecture Schedule

Please check the Canvas course website for the most up-to-date lecture schedule.

Achieve assignments are continuously available; particular assignments will be posted regularly.

| Day  | Date   | Lecture   | Topic   | Chapter            | Assignments Due   |
|------|--------|-----------|---|--------------------|---|
| Mon  | 9-Jan  | Lecture 0 | Course Introduction   |                    |   |
| Weds | 11-Jan | Cells 1   | Science as a Process/Life's Chemistry and the Importance of Water 1 | 1.1, 1.5, 2.1, 2.2 |   |
| Fri  | 13-Jan | Cells 2   | Life's Chemistry and the Importance of Water 2                      | 2.3, 2.4, 2.6      |   |
| Mon  | 16-Jan |           | MLK Jr. Day - NO CLASS  |                    |   |
| Weds | 18-Jan | Cells 3   | Lipids and Carbohydrates  | 3.1, 3.2           | Animation 2.1 Chemical Bond Formation<br>Animation 2.1 Quiz<br>Activity 2.2 Functional Groups<br>Chapter 2 Summative Quiz   |
| Fri  | 20-Jan | Cells 4   | Nucleic Acids and Proteins  | 3.3, 3.4           |   |
| Mon  | 23-Jan | Cells 5   | Proteins and Enzymes  | 3.4, 3.5           | Animation 3.1 Macromolecules: Lipids<br>Animation 3.1 Quiz<br>Animation 3.2 Macromolecules: Carbohydrates<br>Animation 3.2 Quiz<br>Animation 3.3 Macromolecules: Nucleic Acids<br>Animation 3.3 Quiz<br>Activity 3.4 Features of Amino Acids<br>Activity 3.4 Quiz<br>Animation 3.4 Macromolecules: Proteins<br>Animation 3.4 Quiz |
| Weds | 25-Jan | Cells 6   | Membranes   | 4.1, 4.2, 4.3      |   |
| Fri  | 27-Jan | Cells 7   | Cell Structure 1  | 4.4                | Animation 3.6 Enzyme Catalysis<br>Animation 3.6 Quiz<br>Animation 3.7 Allosteric Regulation of Enzymes  |

|      |            |               |                                 |          |  |
|------|------------|---------------|---------------------------------|----------|--|
|      |            |               |                                 |          | Animation 3.7 Quiz<br>Chapter 3 Summative Quiz   |
| Mon  | 30-<br>Jan | Cells 8       | Cell Structure 2                | 4.5      |  |
| Weds | 1-<br>Feb  | Cells 9       | Cell Signaling 1                | 6.1, 6.2 |  |
| Fri  | 3-<br>Feb  | Cells 10      | Cell Signaling 2                | 6.3, 6.4 | Animation 4.4 The Golgi Apparatus<br>Animation 4.4 Quiz<br>Chapter 4 LearningCurve<br>Chapter 4 Summative Quiz<br>Animation 6.1 Signal Transduction and Cancer<br>Animation 6.1 Quiz<br>Animation 6.2 Signal Transduction Pathway<br>Animation 6.2 Quiz  |
| Mon  | 6-<br>Feb  | Cells 11      | ATP and Redox Reactions         | 5.1      |  |
| Weds | 8-<br>Feb  | Cells 12      | Respiration and<br>Fermentation | 5.2      |  |
| Fri  | 10-<br>Feb | Cells 13      | Photosynthesis                  | 5.5      | Animation 5.1 Electron Transport and ATP<br>Synthesis Animation 5.4 Photophosphorylation<br>Animation 5.4 Quiz<br>Chapter 5 Summative Quiz<br>Animation 5.1 Quiz<br>Activity 5.2 Glycolysis and Fermentation<br>Activity 5.3 The Citric Acid Cycle<br>Activity 5.5 The Respiratory Chain<br>Chapter 6 Learning Curve<br>Chapter 6 Summative Quiz |
| Mon  | 13-<br>Feb | Cells 14      | Review                          |          |  |
| Tues | 14-<br>Feb | <b>EXAM 1</b> | <b>EXAM 1</b>                   |          |  |
| Weds | 15-<br>Feb | Genetics<br>1 | Cell Cycle and Mitosis          | Ch. 7    |  |
| Fri  | 17-<br>Feb | Genetics<br>2 | Meiosis                         | Ch. 7    | Animation Quiz 7.2 Meiosis<br>Animation Quiz 7.1 Mitosis<br>Ch. 7 Adaptive Quiz<br>Ch. 7 Summative Quiz  |
| Mon  | 20-<br>Feb | Genetics<br>3 | Mendel–Monohybrid Cross         | Ch. 8    |  |
| Weds | 22-<br>Feb | Genetics<br>4 | Mendel–Dihybrid Cross           | Ch. 8    |  |
| Fri  | 24-<br>Feb | Genetics<br>5 | Non-Mendelian Genetics          | Ch. 8    |  |
| Mon  | 27-<br>Feb | Genetics<br>6 | Chromosomes and Linkage         | Ch. 8    |  |
| Weds | 1-<br>Mar  | Genetics<br>7 | Genetic Material                | Ch. 9    | Animation Quiz 8.1 Independent Assortment of<br>Alleles  |

|      |        |               |   |        |   |
|------|--------|---------------|---|--------|---|
|      |        |               |   |        | Animation Quiz 8.2 Alleles That Do Not Assort Independently<br>Ch. 8 Adaptive Quiz<br>Ch. 8 Summative Quiz  |
| Fri  | 3-Mar  | Genetics 8    | Mutation                                      | Ch. 9  |   |
| Mon  | 6-Mar  | Genetics 9    | Transcription                                 | Ch. 10 | Animation Quiz 9.1 The Hershey-Chase Experiment<br>Animation Quiz 9.2 The Mendelson-Stahl Experiment<br>Animation Quiz 9.3 DNA Replication and Polymerization<br>Animation Quiz 9.4 Leading and Lagging Strand Synthesis<br>Ch. 9 Adaptive Quiz<br>Ch. 9 Summative Quiz |
| Weds | 8-Mar  | Genetics 10   | Translation                                   | Ch. 10 |   |
| Fri  | 10-Mar | Genetics 11   | Gene Regulation I: Prokaryotes                | Ch. 11 | Animation Quiz 10.1 Transcription<br>Animation Quiz 10.2 RNA Splicing<br>Animation Quiz 10.3 Deciphering the Genetic Code<br>Animation Quiz 10.4 Translation<br>Ch. 10 Adaptive Quiz<br>Ch. 10 Summative Quiz   |
| Mon  | 13-Mar |               | SPRING BREAK                                  |        |   |
| Weds | 15-Mar |               | SPRING BREAK                                  |        |   |
| Fri  | 17-Mar |               | SPRING BREAK                                  |        |   |
| Mon  | 20-Mar | Genetics 12   | Gene Regulation II: Eukaryotes                | Ch. 11 |   |
| Weds | 22-Mar | Genetics 13   | Review  |        | Animation Quiz 11.1 The lac Operon<br>Animation Quiz 11.2 The trp Operon<br>Animation Quiz 11.3 Initiation of Transcription<br>Ch. 11 Adaptive Quiz<br>Ch. 11 Summative Quiz  |
| Fri  | 24-Mar | Genetics 14   | No Class - Study!                             |        |   |
| Fri  | 24-Mar | <b>EXAM 2</b> | <b>EXAM 2</b>                                 |        |   |
| Mon  | 27-Mar | Evolution 1   | History of Evolutionary Thought               | 13     |   |
| Weds | 29-Mar | Evolution 2   | Natural Selection                             | 13     |   |
| Fri  | 31-Mar | Evolution 3   | Sexual Selection and Other Types of Selection | 13     | Animation 13.1 and quiz, video 13.1   |

|      |            |                 |   |    |   |
|------|------------|-----------------|---|----|---|
| Mon  | 3-<br>Apr  | Evolution<br>4  | Hardy-Weinberg and the<br>Forces of Evolution | 13 |   |
| Weds | 5-<br>Apr  | Evolution<br>5  | Molecular Evolution                           | 15 |   |
| Fri  | 7-<br>Apr  | Evolution<br>6  | Evolution of Sex;<br>Adaptations              | 13 | Activity 13.2, 13.3, 13.5; Video 13.3, Ch 13<br>Learning curve and Summative quiz   |
| Mon  | 10-<br>Apr | Evolution<br>7  | Species and Speciation                        | 16 |   |
| Weds | 12-<br>Apr | Evolution<br>8  | Modes of Speciation                           | 16 |   |
| Fri  | 14-<br>Apr | Evolution<br>9  | Reading Phylogenies                           | 14 | Activity 14.1, Animation 14.1 and quiz; video<br>15.1, analyze data companion exercise 15.3,<br>Activity 16.1, animation 16.1 |
| Mon  | 17-<br>Apr | Evolution<br>10 | Building Phylogenies                          | 14 |   |
| Weds | 19-<br>Apr | Evolution<br>11 | History of Life on Earth I                    | 17 |   |
| Fri  | 21-<br>Apr | Evolution<br>12 | History of Life on Earth II                   | 17 | Activity 17.1, media clip 17.1, video 17.2  |
| Mon  | 24-<br>Apr | Evolution<br>13 | Review  |    |   |
| Weds | 26-<br>Apr | Evolution<br>14 | No Class - Study!                             |    |   |
| Weds | 26-<br>Apr | <b>EXAM 3</b>   | <b>EXAM 3</b>                                 |    |   |

## Getting Help

### Getting Help

When you have a question about the course material, policies, or assignments, check the following sources first to see if it is already answered, **before** emailing your instructors or TA:

- Course Syllabus
- Canvas Announcements (this is the primary means that your instructors have to communicate with you in a timely manner)
- Canvas FAQ page
- Canvas Discussion Boards

If you still cannot find the answer to your questions:

- If it is a question that others might find useful to know the answer to as well, post it in the Canvas Discussion section.
- If it is regarding a technical problem, please contact the relevant tech support line (see below).
- If it is a question specific to you (e.g. account or grade specific), email your TA. **All correspondence regarding the online assignments (Achieve) must be sent to the TA.** Barring unusual circumstances, expect a reply within 24 hours during the work week. Emails and Canvas Discussion posts are checked at least once per day, but sometimes not more than that.

## A. Computing Problems

- For issues with technical difficulties with Canvas, please contact the UF Help Desk at:
  - [learning-support@ufl.edu](mailto:learning-support@ufl.edu)
  - (352) 392-4357 - select option 2
  - <https://elearning.ufl.edu/student-help/>
- To get help with Achieve, visit: <https://macmillan.force.com/macmillanlearning/s/achieve>
- For help with Learning Catalytics, visit <https://support.pearson.com/getsupport/s/>.

## B. Questions about Grades in Canvas, online assignments (Achieve) and lecture participation credit (Learning Catalytics)

All correspondence regarding the online assignments (Achieve) and lecture participation (Learning Catalytics), and grades in Canvas must be sent to the TA (**see course front page for contact info**).

To facilitate actual discussion, a discussion forum will be set up in Canvas. Any questions regarding the lecture material or the online assignments should be posted there, so that your instructors or your fellow students will be able to provide answers. Don't be shy about asking questions; after all, if you are confused about the material there will almost certainly be other students with the same questions.

## C. University Support Services

College can be a very stressful time in a person's life. Resources are available on campus to help students meet academic goals and solve personal problems that may interfere with their academic performance. If you find that you are having difficulty emotionally or academically, there is substantial support available. See this guide "[My CWC Plan](#)" to help make a plan for resource use or contact one of the following services:

### Health and Wellness

1. **U Matter, We Care:** If you or someone you know is in distress, please contact <mailto:umatter@ufl.edu>, 352-392-1575, or visit <https://umatter.ufl.edu/> to refer or report a concern and a team member will reach out to the student in distress.
2. **Dean of Students Office**, 202 Peabody Hall, 392-1261
3. **Counseling and Wellness Center:** Visit <https://counseling.ufl.edu/> or call 352-392-1575 for information on crisis services as well as non-crisis services.
4. **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or visit <https://shcc.ufl.edu/>.
5. **University Police Department:** Visit <https://police.ufl.edu/> or call 352-392-1111 (or 9-1-1 for emergencies).
6. **UF Health Shands Emergency Room/Trauma Center:** For immediate medical care in Gainesville, call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; <https://ufhealth.org/uf-health-shands-emergency-room-trauma-center>.
7. **UF Field and Fork Pantry**, 564 Newell Dr., 294-3601

### Academic and Student Support

1. **Tutor Matching Service:** Students in BSC 2010 are eligible for FREE one-on-one tutoring through UF's partnership with TMS. <https://studentsuccess.ufl.edu/tms/>
2. **Career Connections Center:** 352-392-1601. Career assistance and counseling services: <https://career.ufl.edu/>
3. **Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources: <https://uflib.ufl.edu/>; [ask@ufl.libanswers.com](mailto:ask@ufl.libanswers.com)
4. **Teaching Center:** 352-392-2010 General study skills and tutoring: <https://academicresources.clas.ufl.edu/>
5. **Writing Studio:** 352-846-1138. Help brainstorming, formatting, and writing papers: <https://writing.ufl.edu/writing-studio/>

6. [CLAS Academic Advising Center](#), Farrior Hall, 100 Fletcher Drive, 392-1521
7. We are commitment to promoting diversity and inclusion based on sex, including sexual orientation and gender identity. For **Title IX** issues, please visit <https://titleix.ufl.edu/> or contact the UF Title IX office at (352) 273-1094 or [inform@titleix.ufl.edu](mailto:inform@titleix.ufl.edu).

**Course Technology Requirements**

It is the responsibility of the student to maintain a functioning computing system and internet connection that can meet the minimum technical requirements of the course.

Computing/internet connectivity issues will NOT be acceptable excuses for missed deadlines unless they are brought to the attention of the instructor at least 48 hours prior to the deadline and accompanied by the ticket number from technical support.

**Software Use**

All faculty, staff, and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

| Technology                                       | Privacy Policy                 | Accessibility Policy/Statement |
|--|--------------------------------|--------------------------------|
| Instructure (Canvas)                             | <a href="#">Privacy Policy</a> | <a href="#">Accessibility</a>  |
| Sonic Foundry (Mediasite Streaming Video Player) | <a href="#">Privacy Policy</a> | <a href="#">Accessibility</a>  |
| Zoom   | <a href="#">Privacy Policy</a> | <a href="#">Accessibility</a>  |
| YouTube (Google)                                 | <a href="#">Privacy Policy</a> | <a href="#">Accessibility</a>  |
| Microsoft  | <a href="#">Privacy Policy</a> | <a href="#">Accessibility</a>  |



|                              |                                |                               |
|------------------------------|--------------------------------|-------------------------------|
| Adobe                        | <a href="#">Privacy Policy</a> | <a href="#">Accessibility</a> |
| MacMillan Learning (Achieve) | <a href="#">Privacy Policy</a> | <a href="#">Accessibility</a> |

**Disclaimer**

This syllabus represents the instructors' current plans and objectives. As we go through the semester, those plans may need to change to enhance the class's learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.