BSC 2005 – Biological Sciences for Non-Majors (online)

UF Sections 0087 (11188), 0088 (20371), 1B49 (11217), 1B50 (11218), 1B51 (11219), 34F4 (11221), 34F8 (11222), 34F9 (11223), 417D (18549), 418D (28784)

UFO Sections 009B (11189), 11GB (11190), 1432 (11191), 1434 (11215), 1435 (11216) Syllabus for Spring 2023

I. Course Description

This course addresses core concepts in biology, including the Cell, Genetics, Evolution, Biodiversity, Ecology, and Conservation/Sustainability. For non-majors. 3 credits.

Note: BSC2005L is a separate course, and is taught by a separate instructor – NOT Dr. Gerlach!

II. Course Meetings

First day of classes: Monday 09 January 2023 **Last day of classes:** Saturday 29 April 2023

Final exam: Tuesday 02 May 2023, 8:00 – 10:00 PM

Course Meeting Times: This course is entirely online and asynchronous, with weekly deadlines but no fixed meeting times except for exams. Exams will be available online during a limited time window on the days posted. Students may work on course material at their own pace from any location with a reliable internet connection, but it is each student's responsibility to keep up with course assignments and meet posted deadlines for all assignments. All deadlines and exam times are US Eastern time; students who are not in the US Eastern time zone are responsible for doing the appropriate conversions to ensure their work is submitted on time.

III. Instructors

Course Instructor:

Dr. Nicole Gerlach (she/her)

Department of Biology Office: 520 Carr Hall Phone: 352-392-2419

E-mail: ngerlach@ufl.edu (preferred)

Teaching Assistants:

1B49 / 11217

Office Hours: TBA

 Ellen Humbel
 Adrian Lee
 Lazaro Vinola Lopez

 Sections: 0087 / 11188
 Sections: 009B / 11189
 Sections: 1B51 / 11219

 0088 / 20371
 1B50 / 11218
 34F4 / 11221

 11GB / 11190
 34F9 / 11223
 34F8 / 11222

 1432 / 11191
 418D / 28784 last names M-Z
 418D / 28784 last names A-L

E-mail: sz.lee@ufl.edu E-mail: lvinolalopez@ufl.edu
E-mail: ehumbel@ufl.edu Office Hours: TBA Office Hours: TBA

IV. Course Communications

- A. Course Website: https://elearning.ufl.edu/ or https://ufl.instructure.com/courses/470532
- **B.** Office Hours: Office hours with Dr. Gerlach will be held via Zoom this semester on Thursdays from 3:30-4:30 p.m. Please see the course Canvas site for the Zoom link. If you have a course conflict and are unable to attend the drop-in office hours, please e-mail Dr. Gerlach or your TA to arrange an appointment.
- C. Contacting Your Instructors: If you have a question about course mechanics or course material that cannot be answered from the syllabus, course announcements, or the course FAQ, please post it to the Discussion Boards on Canvas (see section VIII. "Getting Help", below). If you have a question involving a personal/grade-related issue, please e-mail your TA and Dr. Gerlach. All e-mail correspondence must originate from your @ufl.edu account or the Canvas Inbox system, and contain "BSC 2005" in the subject line. E-mails not meeting these requirements may not be recognized by our e-mail filters, and thus may not be answered. Barring unusual circumstances, expect a reply within 24 hours during the week, and 48-72 hours over the weekend. E-mails and Discussion Board posts are typically checked at least once per day, but sometimes not more than that.
- D. **Communications From Your Instructors:** Each student is solely responsible for reading and following the instructions, guidelines and schedules in this syllabus and on the course webpage and in course announcements. Not having read the information in this syllabus, on the webpage, or in course announcements will not constitute an excuse for missing deadlines, assignments, or other assessments. Please set your preferences in Canvas so that you receive timely notifications of course announcements and other information.

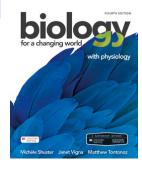
V. Course Resources

A. Textbook

Biology for a Changing World, 4e by Shuster, Vigna, and Tontonoz. W.H. Freeman (publisher), 2021.

A physical copy of the textbook is not required for the course, but is optionally available in the UF Bookstore. The required Achieve access (see below) includes an electronic copy of the textbook.

There are current versions of the textbook on reserve at the Marston Science Library. Visit the Reserve Materials area to check out these copies.



B. MacMillan Online Resources

Achieve is an online assignments and tutorial system from the textbook publisher that includes an electronic version of the textbook. Achieve will be used for required readings, interactive activities, and quizzes. Access to Achieve is required for BSC2005.

Achieve will be offered at the lowest cost option through UF All Access. UF All Access allows students 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. Students who do not choose this option will be able to purchase the access code directly from the MacMillan site. All options provide access to the same materials.

To access Achieve via UF All Access:

- 1. Go to https://bsd.ufl.edu/allaccess and click on the "Opt In" tab or the "View Eligible UF All Access Classes" button.
- 2. Log in with your GatorLink account.
- 3. Students are shown a list of classes in which they are enrolled in that are participating in UF All Access with the prices included.

- 4. Click the Opt-in check box next to the desired class(es).
- 5. Once you have reviewed your course selections click the Opt-In button.
- 6. The access code or access instructions are now displayed. Please copy the code and follow the instructions on the course Canvas page for gaining access to your materials.
- 7. The classes that you opted into will continue to be displayed at https://bsd.ufl.edu/allaccess for up to three weeks after the term has started. Be sure to register the access code before this deadline.

For help with this system, difficulties finding your access code, or issues with an invalid access code, please contact allaccess@bsd.ufl.edu.

If you are waiting on financial aid disbursement and choose not to use the UF All Access program, you can register for temporary Achieve access via the MacMillan site, but you will have to purchase access once the temporary access expires.

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.

For help with Achieve, contact MacMillan Technical Support: (800) 936-6899 (phone) or via their web form at https://macmillan.force.com/macmillanlearning/s/achieve.

C. Course Website (Canvas)

All other class material that is not part of the Achieve system – including the syllabus, lectures, assignments, discussions, quizzes, and gradebook – will be posted on the course Canvas website (https://elearning.ufl.edu/). For help with Canvas, call the UF Computing Help Desk at 352-392-4357, or visit the e-Learning support website: http://help.instructure.com/.

D. Course Fee

For UF students, the course fee is \$27.99. For UFO students, this fee is included in tuition.

E. Additional Course Supplies

Some activities will require students to acquire additional inexpensive materials on their own for "kitchen experiments" or simulations. These include: rubbing alcohol, a coffee filter, some utensils, and some dry particulate food (like dry beans or uncooked macaroni) or household items (like paperclips or pennies).

VI. Course Policies

A. Time Commitment

The UF College of Liberal Arts and Sciences assumes that each student will devote on average 3-4 hours per week per credit-hour to each course during the regular semester. Because BSC 2005 is 3 credits, each student should therefore expect to devote an average of 9-12 hours per week to this course in a 15-week semester. This time will not necessarily be evenly distributed; some weeks will have heavier workloads than others.

B. Attendance

Students are expected to complete all assigned work by the due date. Students with pre-planned travel/conflicting activities on the day of the deadline (including student athletes) are responsible for managing their time wisely and should plan to work ahead when needed so that they can submit their work before they leave. Excuses such as "we didn't get back from (activity) when planned and I didn't have time" or "my computer crashed half an hour before the deadline and tech support wasn't open" will NOT be accepted as excuses for missed deadlines.

Unavoidable emergency circumstances (e.g. severe illness, hospitalization, or family emergencies) that

prevent you from completing your work in a timely manner or cause you to miss an exam require you to obtain a letter from a medical professional or the Dean of Students office (https://care.dso.ufl.edu/instructor-notifications/) that specifies the time period for which you are excused from classwork, and submit it to your instructors as soon as possible (i.e. within a week, barring extreme circumstances like extended hospitalization).

C. Computing Requirements

It is the responsibility of the student to maintain a functioning computing system and internet connection. Computing/internet connectivity issues will NOT be acceptable excuses for missed deadlines unless they are brought to the attention of the instructor at least 24 hours prior to the deadline and accompanied by the ticket number from technical support. See section VIII for Technical Support contact information. Internet connectivity problems can cause issues with assignment submission, so students should verify that all activities are marked as "complete" and that all files uploaded correctly after they hit the "submit" button.

Microsoft Office programs are required for many of the assignments; these can be accessed by current UF and UFO students through GatorCloud: http://www.it.ufl.edu/gatorcloud/. Submissions must be made either in an MS Office format (.doc or .docx, .ppt, etc.) or in a generally readable file format (.pdf, .jpg, .txt, etc.); proprietary file formats such as Pages, Keynote, etc. cannot be opened and will not count as an on-time submission. Links to external services such as GoogleDocs will not be accepted in place of a file uploads; the file must be saved into a static format (.pdf, etc.) and uploaded.

D. Fxams

Any material covered during the lectures or assigned in the reading may be included in the lecture exams. This can include textbook reading and illustrations, the lectures themselves, and any supplemental videos. Take notes!

Exams will be administered online using Honorlock proctoring software. Students must have a functioning webcam and microphone (integrated or external), and must have the Chrome browser installed. Students will need to show their Gatorlink ID at the beginning of each Honorlock Proctoring section. Students are required to complete a full 360 degree room scan and show both sides of their blank scratch paper (if allowed) to the camera prior to the Exam starting. If students do not meet these requirements, it will be considered cheating and students will fail the exam and be reported for an Honor Code violation. Additional information about taking Honorlock-proctored exams will be available on the course website. Students must take the exam during the specified exam window; no additional time will be given to complete an exam if you start late.

Exams will be available for review by appointment 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.

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, conflicting exam, 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.

E. Late Work

All work must be submitted by the posted deadlines. Please do not wait until the night of the deadline to complete your assignments!

Assignments, quizzes, and other activities in Canvas and Achieve automatically close at the deadline. No late work will be accepted on these assignments without an excused extension from the Dean of Students

(see VI.B above) or a technical support trouble ticket (see VI.C above) documenting technical issues for at least 24 hours prior to the deadline.

F. "Life Happens" Free Pass

As explained above, assignments may not be submitted late without a documented excused absence, and deadlines will not be extended due to technical issues unless those issues are brought to our attention at least 24 hours ahead of time. For this reason, we encourage all students to submit their work well ahead of the deadline, and not wait until the last minute. However, we are aware that sometimes life happens, and technology can be troublesome, and this can sometimes lead to a submission not going through, a deadline being missed, the wrong file being submitted, etc. To deal with these situations, each student will have ONE "Life Happens" free pass that they can use to excuse ONE written assignment or quiz during the semester.

This is a separate mechanism from the course policy covering approved excused absences/extended deadlines for personal/family emergencies. Late work will still be accepted in those cases, as described above. The "Life Happens" free pass is meant for situations in which a student would ordinarily receive a zero in the gradebook for a missed assignment or quiz, and is not applicable for cases in which a student was able to complete the assignment.

Some rules:

- Each student may use their free pass to have ONE missed assignment of their choice excluded from their final grade. Exams are not eligible for the free pass!
- The free pass is only good for excusing ONE assignment, not a whole module's worth of work.
- Use of the free pass MUST be requested via a submission comment on the assignment or quiz. No requests made via e-mail will be honored.
- Requests to use the free pass must be made by ONE WEEK after the deadline for that assignment or quiz at the latest. For Module 15 assignments at the end of the semester, requests to use the free pass must be made within 72 HOURS (three days) of the deadline. Requests that come in past these deadlines will not be honored.
- Once a student's pass is used, it's gone; they cannot change their mind and use it on a different assignment later in the semester.
- The free pass cannot be used to excuse assignments that are part of a case of suspected / verified academic misconduct.

G. Assignment Submissions and Resubmissions

Animations within Achieve are graded on the first attempt; please do not start these quizzes until you are ready to complete them. After completing an Animation or an Adaptive Quiz, please ensure that the score has been posted to the Achieve gradebook. Note that Achieve scores may not sync to the Canvas gradebook immediately, but scores for these activities/quizzes should always be visible in the Achieve gradebook.

All files for written assignments must be submitted through the proper Canvas assignment; files will not be accepted over e-mail or via Canvas comments. Files must be saved in the appropriate file format and uploaded to Canvas; links to GoogleDocs or similar services will not be accepted as replacements for file uploads. It is each student's responsibility to ensure that their work is submitted prior to the deadline. Please double-check your file submissions to make sure they have completed successfully. Errors with the submission process (such as the internet connection being lost mid-submission) will not be grounds for deadline extensions unless they occur at least 24 hours prior to the deadline and are accompanied by a UF HelpDesk ticket number (see VI.C above). Please also double-check that you have submitted the correct file; submitting an incomplete or incorrect file will result in a zero. For assignments within Canvas that require a file upload, these may be resubmitted multiple times; we will only consider the most recent submission. However, once a submission has been graded, even if it is prior to the deadline, no further submissions will be considered.

H. Classroom Behavior

Please behave with courtesy towards your fellow students and the instructors. This is particularly important in collaborative discussions where you are voicing opinions and commenting on those of other students. Students who persist in being rude or disrespectful will be blocked from future participation (with corresponding loss of points).

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.

I. Grammar

Correct grammar, punctuation, spelling, capitalization and paragraphing should be used in any college level submission, including the discussion boards. (U SHLD NT US TXT SPEAK LKE IDK OR BFF THX ALSO DNT USE ALL CAPS. Ugh.) We will take note of spelling and grammar in all submissions and we will grade accordingly, even if it is not explicitly included on the rubric. If you need help with any aspect of your writing, please visit the UF Writing Studio at http://writing.ufl.edu/writing-studio/.

J. Course Materials

All materials for this course, including but not limited to lectures, quizzes, exams, and worksheets, are the intellectual property of the professor, TAs, or textbook publisher, and are provided solely for the personal use of currently enrolled students. These materials may not be distributed to other students or repositories without express written permission, even after the conclusion of the course at the end of the semester. Doing so will be considered a violation of the UF Honor Code (see below).

VII. UF Policies

A. 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."

More details can be found in the UF Honor Code at https://sccr.dso.ufl.edu/process/student-honor-code/. Academic dishonesty or other Honor Code violations will not be tolerated, and each incident, as determined by Dr. Gerlach, will result in – at minimum – the loss of a full letter grade in the course, a zero on the assignment or exam in question, and additional sanctions as appropriate, up to and including a failing grade in the class. In this course, academic dishonesty includes (but is not limited to) collaborating with others on course assignments, quizzes, or exams; utilizing prohibited materials during exams; copying the work of other students in whole or in part; allowing other students to copy your work or otherwise sharing completed assignments in person or online (during the semester or in the future); discussing or sharing quiz/exam questions or answers with other students; and plagiarism, including insufficient paraphrasing.

All written submissions in this course are run through TurnItIn's anti-plagiarism software, which gives each submission a similarity score, depending on the degree to which it matches the sources in TurnItIn's database, which include web sites, journal articles, and other student submissions. Students can view their own TurnItIn score and similarity report on a submission, generally within a few minutes of submission. Submissions with a high TurnItIn score should be rewritten to better put concepts into your

own words, and ungraded assignments may be resubmitted without penalty prior to the deadline (see section VI.G above).

If you have knowledge of any instances of academic dishonesty in this class, you are obligated to 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 at: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

B. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office's 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. Students should provide their DRC accommodation letter to Dr. Gerlach as soon as possible, ideally by the second week of classes. No accommodations are available to students who lack this documentation, and accommodations are not retroactive (i.e. accommodations can not be made for assignments submitted prior to Dr. Gerlach receiving the letter). It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed, and instructors cannot provide accommodations beyond those listed on a student's documentation. Once notification is complete, the Disability Resource Center will work with the instructor to accommodate the student.

C. Drop/Add/Withdrawal

A student can drop/add this course during the drop/add period with no penalty. After drop/add, a student who drops will receive a W until the date listed in the academic calendar. After that date, the student may be assigned an "E" (fail). Note: it is the responsibility of the STUDENT to withdraw from a course, not the instructor. Failure to participate/complete the class does NOT constitute a drop.

D. 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, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/. We do take student feedback into account when planning future semesters; please let your instructors know if there are particular modules and/or activities that you found helpful or topics that you would have liked to cover in more depth, as well as any that you found less useful.

VIII. Getting Help

A. Computing Problems

For issues with technical difficulties in Canvas, or general computing questions, contact the UF Help Desk:

- (352) 392-HELP
- https://helpdesk.ufl.edu/

For issues with Achieve, please contact MacMillan technical support at:

- (800) 936-6899
- https://macmillan.force.com/macmillanlearning/s/achieve

B. 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 "A Self Help Guide for Students" or contact on of the following services:

- 1. <u>UF Counseling and Wellness Center</u>, Radio Rd Facility, 392-1575
- 2. Dean of Students Office, 202 Peabody Hall, 392-1261
- 3. Career Resource Center, Reitz Union, 392-1601
- 4. <u>CLAS Academic Advising Center</u>, Farrior Hall, 100 Fletcher Drive, 392-1521
- 5. UF Field and Fork Pantry, 564 Newell Dr., 294-3601

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students (202 Peabody Hall, 392-1261) for support. Furthermore, please notify your instructor(s) if you are comfortable in doing so. This will enable us to provide any resources that we may possess.

C. Other Questions

If you have non-tech-support questions about other aspects of the course, check the following sources first to see if it is already answered, **before** e-mailing your instructors:

- Course Syllabus
- Course Orientation Module in Canvas
- Course FAQ page
- Course Announcements (this is the primary means that your instructor has to communicate with you in a timely manner)
- o Course Questions Forum Discussion Board

If you still cannot find the answer to your questions:

- o If it is a question that others might find useful to know the answer to as well, post it to the discussion board.
- If it is a question specific to you (e.g. account or grade specific), contact Dr. Gerlach and your TA
 via e-mail.

IX. General Education

A. General Education Classification

BSC 2005 meets the general education requirements for Biological Sciences.

B. Program Area Objectives

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.

C. 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 areas: content, communication and critical thinking.

- **1. Content**: Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.
- **2. Communication**: Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.
- **3. Critical Thinking**: Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.

D. General Education in the Context of This Class

Each module will contain between 1-3 activities worth between 10 and 30 points each; this represents approximately 35% of the final grade. The purpose of these activities is to encourage students to think about Biology outside the framework imposed by the textbook or instructor lectures by giving them the opportunity to develop their own materials to support or reject existing scientific hypotheses. Hypothesis testing is most explicitly addressed in the first module, on the scientific method. Students will gain practice formulating hypotheses and analyzing experimental data throughout the class, in various activities that involve virtual and/or "kitchen" experiments. Activities that include an emphasis on hypothesis testing are marked on the schedule below with ‡.

For each activity, students are provided with specific instructions for completing the activity as well as a grading rubric. The grading rubrics are designed to evaluate the student's mastery of specific content and their ability to produce bodies of work within the guidelines specified in the instructions. Some examples of activities types include: research using reliable web sources, expository writing, video reviews, "kitchen experiments", inquiry activity sheets, and construction of figures and tables.

The course also includes nine discussions, in which students answer an open-ended discussion prompt regarding the ethics and application of biology in daily life. Students will be expected to provide a thoughtful answer to the initial prompt, as well as to respond to the answer of at least one of their classmates, in order to foster critical thinking skills within a learning community.

E. General Education in the Context of This Class

Each module will contain between 1-3 activities worth between 10 and 30 points each; this represents approximately 35% of the final grade. The purpose of these activities is to encourage students to think about Biology outside the framework imposed by the textbook or instructor lectures by giving them the opportunity to develop their own materials to support or reject existing scientific hypotheses. Hypothesis testing is most explicitly addressed in the first module, on the scientific method. Students will gain practice formulating hypotheses and analyzing experimental data throughout the class, in various activities that involve virtual and/or "kitchen" experiments. Activities that include an emphasis on hypothesis testing are marked on the schedule below with ‡.

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X. Assessments and Grading

A. Due Dates

This course is divided into fifteen modules, typically with one due each week of the semester during Fall and Spring semesters. Some semesters may have weeks with more than one module due to

accommodate the semester timing; see the schedule below for details. The **learning activities** for each module will be due at **11:59:00 p.m.** on the **Wednesday** of that module's week, and the **assessments** for each module will be due at **11:59:00 p.m.** on the **Friday**. There may be exceptions for the first and/or last module of the semester to accommodate add/drop and/or reading days; please see the schedule below for details. The due dates for each module are listed on the last pages of the syllabus, and will also be listed on each module's page within Canvas.

B. Module Coursework

Each module will consist of various learning activities to read/watch/complete, and assessments to submit. All required activities and assignments for each unit will be listed on that module's page on Canvas. The various pieces that might be included in a unit are outlined below.

1. Learning Activities

- a. Read the chapter(s).
- b. **Learning Animations.** There are typically 3-4 per chapter. Each one involves a short animated infographic to work through, followed by a short quiz (usually 2-3 questions) on the material covered in the infographic. You have two attempts to answer each question; getting a correct answer on the first attempt is worth 100%, getting a correct answer on the second attempt is worth 50%.
- c. Adaptive Quizzes: In these quizzes, the questions get harder or easier depending on how you do. You're not penalized for getting questions wrong, but you need to reach a certain level of question for each unit. Once you reach that level, you receive full credit (10 pts) for the unit. After that point, you can continue answering questions to review the material without affecting your score.
- d. **Lecture videos in PlayPosit:** All lecture videos will have embedded interaction questions in PlayPosit. To receive credit, you must complete every interaction in the video. You must also watch the video until the very end. This tells PlayPosit you are done with the video and sends a grade to Canvas. You have one attempt to answer each question, but you may re-watch the video as a whole for another attempt to re-answer the questions.

2. Assessments

- a. Perusall Discussions: Perusall is a tool that allows students to collaboratively annotate a document or video. Each discussion will have a document to read or a video for you to watch, as well as a discussion prompt to guide your comments and annotations. Perusall grades annotations based on their quality and effectiveness. A high-quality and effective comment deeply engages with points in the readings, stimulates further discussion with other students, offers informative questions or comments, and helps others by addressing their questions or confusions.
- b. **Written Submissions.** These are activities that will ask you to do something some outside research, a kitchen experiment, an online simulation, etc., and then write up and submit your findings / answers to questions to Canvas. Rubrics for each of these assessments are available in Canvas.

C. Exams

All exams will be available online through Honorlock during the assigned assembly exam times. Exams will be primarily multiple choice questions, although they may include many choice, matching, fill in the blank, etc. Exams may be curved if needed; details of the curve (if any) will be clearly announced.

D. Grading Category Weights

| Assignment Category | Percent of Final Grade | | | |
|------------------------------|------------------------|--|--|--|
| Achieve (Learning animations | 10 | | | |
| and adaptive quizzes | | | | |
| Lecture videos in PlayPosit | 15 | | | |

Assignments and Discussions 25 Exams 50

E. Grading

Grades from assignments, exams, Playposit, Perusall, and Achieve activities, and lecture quizzes will be posted on Canvas throughout the semester. It is the responsibility of the student to check their grades on Canvas and to let instructors know about discrepancies within one week of the grades being posted to Canvas.

Minimum grade cutoffs are listed in the table below. 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 at least 93% of the possible points, you are guaranteed to earn an A grade. Final scores will be rounded to one decimal place but will NOT be rounded beyond that (e.g., 89.92% will be rounded to 89.9%, not 90%). Being on the borderline of the next highest grade can be frustrating, so please put in the work you need to make sure you earn the grade you want!

| Letter Grade | | |
|--------------|--|--|
| Α | | |
| A- | | |
| B+ | | |
| В | | |
| B- | | |
| C+ | | |
| С | | |
| C- | | |
| D+ | | |
| D | | |
| D- | | |
| E | | |
| | | |

Point Range (%) Letter Grade

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.

F. Incomplete ("I"): If a student has completed the majority of the course work with a passing grade and particular DOCUMENTED circumstances prevent completion of the course in the time allotted, the student may, with the agreement of the instructor, be assigned an "I" pending resolution of the grade. All incompletes MUST be resolved by the end of the following term or the student will receive a grade of "E" (failing).

G. Extra Credit

Extra credit assignments *may* be offered at the instructors' discretion; if extra credit is offered, it will be open to all students and will be clearly announced on the course website (i.e. please do not ask). No individualized extra credit will be offered.

H. Special Treatment

Please do not request individual special treatment (extended deadlines without a documented excused absence, grade adjustments, extra credit) at the end of the semester; we do not adjust grades or provide special treatment for individuals for any reason. Plan to do well on all quizzes and other assignments from the beginning of the semester; if you are having difficulty in the class, please let your instructors know sooner rather than later.

XI. Disclaimer

This syllabus represents the current plans and objectives; however, schedules, requirements, and assignments may change throughout the semester as the need arises. Such changes, communicated clearly, are not unusual and should be expected.

XII. Weekly Course Schedule

| | Topic | Learning Activities | | | Assessments | | | | |
|--------|--|-------------------------------|-------------------------|---|---|-----------------------|------------------------------------|--|--|
| Module | | Learning Activities due date* | Chapter | PlayPosit Lectures | Achieve | Assessments due date* | Perusall Discussion | Written Assessments** | |
| 1 | Process of Science | Weds 18 Jan | 1 | What is Biology? The Scientific Process | Learning Animations Adaptive Quiz | _ Fri 20 Jan | | Introduce Yourself Hypothesis Testing | |
| 2 | The Molecules of Life | | 2, 4.2 | Organic Compounds & Biological Molecules Water and the Chemistry of Life Enzymes and Reactions | Learning Animations Adaptive Quiz | | Molecular Biology of Cooking | | |
| 3 | Cell Structure & Function | Weds 25 Jan | 3, M1 | Prokaryotes and Eukaryotes Organelle Structure and Function Transport Across a Membrane | Learning Animations Adaptive Quiz | Fri 27 Feb | | Build an Everyday Cell | |
| 4 | Energy Flow & Photosynthesis | Weds 01 Feb | 5, 6.3- 6.5 | Energy and Thermodynamics Photosynthesis Cellular Respiration & Metabolism | Learning Animations Adaptive Quiz | Fri 03 Feb | Artificial Photosynthesis | Paper Chromatography of Leaf Pigments | |
| | Tuesday 07 February, 8:20-10:10 p.m. EXAM 1 (covers Modules 1-4) | | | | | | | | |
| 5 | DNA & Genetics | Weds 08 Feb | 7, M2, 10.1- 10.3 | DNA Structure Mitosis DNA Replication and PCR | Learning Animations Adaptive Quiz | Fri 10 Feb | DNA Databases and Ethics | Paternity Testing for Baby Birds | |
| 6 | Inheritance | Weds 15 Feb | 11-12 | Meiosis Mendel's Rules of Inheritance Sex-Linked Inheritance Other Patterns of Dominance | Learning Animations Adaptive Quiz | Fri 17 Feb | | Punnett Squares with Puppies | |
| 7 | Natural Selection & Adaptation | Weds 22 Feb | 13, M4 | Darwin's Story Natural Selection and Adaptation Modes of Selection Sexual Selection | Learning Animations Adaptive Quiz | Fri 24 Feb | | Feeding Tools Selection | |
| 8 | Species & Speciation | Weds 01 Mar | 14 | Allele Frequencies & HWE Genetic Drift and Founder Effects Species and Speciation | Learning Animations Adaptive Quiz | Fri 03 Mar | | Evolution in a Fishbowl | |

| Tuesday, 07 March, 8:20-10:10 p.m. EXAM 2 (covers Modules 5-8) | | | | | | | | | |
|--|---|----------------|----------|---|---|---------------|--------------------------------------|--|--|
| 9 | Evidence for Evolution | Weds 08 Mar | 15, 16.1 | Fossils and Fossilization How Good Is the Fossil Record? History of the Earth & Mass Extinctions When Whales Walked | Learning Animations Adaptive Quiz | Fri 10 Mar | | Radioactive Decay Activity Timeline to Scale | |
| | SPRING BREAK | | | | | | | | |
| 10 | Life on Earth | Weds 22 Mar | 16 | Biodiversity and Biogeography Organizing Life's Diversity Building a Phylogeny | Learning Animations Adaptive Quiz | Fri 24 Mar | Why Does Evolution Matter Now? | Phylogeny of Household Objects | |
| 11 | Prokaryotes | Weds 29 Mar | 17 | Prokaryote Diversity Bacteria Archaea Beneficial and Harmful Prokaryotes | Learning Animations Adaptive Quiz | Fri 31 Mar | | Prokaryote Symbioses | |
| 12 | Eukaryotes | Weds 05 Apr | 18 | Endosymbiont Theory and Protists Plants Animals Fungi | Learning Animations Adaptive Quiz | Fri 07 Apr | | Eukaryote Diversity Dichotomous Key | |
| | Tuesday, 11 April, 8:20-10:10 p.m. EXAM 3 (covers Modules 9-12) | | | | | | | | |
| 13 | Population Ecology | Weds 12 Apr | 20 | Modeling Population Growth Regulation & Cycles of Pop. Growth Population Structure Applications of Population Ecology | Learning Animations Adaptive Quiz | Fri 14 Apr | | Isle Royale Population Simulation | |
| 14 | Community Ecology | Weds 19 Apr | 21 | Food Webs, Niches, & Competition Symbioses and Keystone Species Pollinators as Keystone Species Otters & Orcas: An Alaskan Mystery | Learning Animations Adaptive Quiz | Fri 21 Apr | | Species Interactions | |
| 15 | Ecosystem Ecology & Sustainability | Weds 26 Apr | 22, 23 | Biomes Climate Change & Global Warming Sustainability and Footprints | Learning Animations Adaptive Quiz | Sat 29 Apr | Ecosystems and a Warming Earth News | | |
| | Tuesday, 02 May, 8:00-10:00 p.m. EXAM 4 (covers Modules 13-15) | | | | | | | | |

Note: This schedule is subject to change; the most up-to-date listing of the required assignments will be found on the Canvas site.

^{*} All due dates are 11:59:00 p.m. US Eastern time on the date indicated