

# Integrated Principles of Biology 1 Lab Syllabus – Fall 2025

BSC2010L ONLINE ONLY

## I. INSTRUCTOR INFORMATION

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### **Professor:**

Stefanie K Gazda, PhD

Email: [Stefanie.gazda@ufl.edu](mailto:Stefanie.gazda@ufl.edu)

Office Hours: Tuesdays 10 am – 12 pm.

### **Teaching Assistants (and Office Hours):**

Lauren Gillett (Mondays 2 – 4 pm)

Neeka Sewnath (Wednesday s 6:30 – 8:80 pm)

Manasee Weerathunga (Wednesdays 10 am – 12 pm)

*All Office Hours will be held via Zoom. See the Contact Your Instructors page on Canvas for the links. You may make an appointment with the instructor or TAs if these times do not work.*

## II. COURSE INFORMATION

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The entire course will be conducted online through the course CANVAS website. You can directly access the Canvas login at <https://elearning.ufl.edu/>.

This is the syllabus for class numbers 11184, 11181, 111182, 111183, 11080, 11081, 11157, 11180.

## COURSE COMMUNICATION

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All e-mail correspondence to course instructors must originate from your ufl.edu account, have your full name in the body of the e-mail, and contain your course number 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. For the timeliest responses, use the Inbox Tool in Canvas.

## COURSE TEXTBOOK

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This course will use an OpenStax textbook that is available for free to view or download.

Clark, M. A., Douglas, M., & Choi, J. (2018). *Biology* (2nd ed.). OpenStax. Retrieved from <https://openstax.org/details/books/biology-2e>

## COURSE SUPPLIES

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You will need the following materials for this course.

### eScience Kits

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Part of your assignments will be completed using materials from custom eScience kits. Information on how to order these kits will be posted on Canvas. **Do not attempt to find the link for the kit for this lab on your own!** You are required to have the kits by the third week of the semester. No extensions will be granted if you cannot get the kits in time to start the lab. When you are using eScience, your answers for pre-lab quizzes (called Exploration Test Your Knowledge and Question Time), assignments (called Experimentation), and post-lab quizzes (called Evaluation Competency and Extension Questions) will be submitted through the eScience platform. Grades will be transferred to Canvas manually once graded.

### Additional Supplies

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For Lab 9, you will need 100 beads that are identical in size and shape. Half of them (50) must be one color, and the other half (50) another color. We suggest pony craft beads; you can also use beans, but they must be identical in size and shape to not bias your results.

## COURSE DESCRIPTION

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Laboratory experiments are designed to accompany BSC 2010. The BSC Online Lab course (BSC 2010L) is a separate course from the BSC Online Lecture course (BSC 2010).

## PREREQUISITE KNOWLEDGE AND SKILLS

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Degree-seeking students only. Corequisite: BSC 2010 or the equivalent.

## MINIMUM TECHNICAL SKILLS

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To complete your tasks in this course, you will need a basic understanding of how to operate a computer, and how to use word processing software.

.HEIC files are NOT accepted for any assignments or discussions. Please save images as .jpeg files.

As this is an online course, all assignments should be typed whenever possible, including tables: Only type-written documents in a recognizable file format will be accepted; photos/scans of hand-written text or screenshots of typed documents will not be graded and will result in no credit for that assignment (the only exception is for some diagram labels which may be hand-written; these will be made clear on the assignment instructions).

Files should be uploaded in PDF format; do not save text as images within a PDF. If your PDF cannot be read by the Turnitin software (a grey icon will appear in your gradebook next to the assignment), you will need to resubmit it in a readable format **prior** to the due date.

**If your assignment/discussion/quiz/other does not meet these requirements it will not receive credit.**

It is the responsibility of the student (not the instructor or TAs) to make sure their submissions are readable. Resubmissions after the deadline due to improper file submissions are not allowed.

## COURSE GOALS AND STUDENT LEARNING OUTCOMES

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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 the development of reasoned thought and for evaluation of life experiences.

Student Learning Outcomes (SLOs) of the course will be achieved if, by its conclusion, students can:

1. Create a scientific hypothesis and identify testable predictions that logically follow.
2. Construct proper figures representing biological data, and interpret data represented in similar figures.
3. Examine the proper use and function of key types of laboratory equipment, such as microscopes, spectrophotometers, and gel electrophoresis arrays.
4. Examine the importance of statistics in scientific sampling, determine appropriate statistical tests for particular types of data, understand the meaning of statistical significance, interpret statistical results and draw appropriate conclusions from them.
5. Differentiate the relationship between genotype and phenotype and identify methods by which genotype can be determined.
6. Determine the mode of inheritance of genetic traits based on ratios of phenotypes.
7. Identify the primary organs of representative invertebrates and their associated functions.
8. Discuss the evidence that all living things are descended from a common ancestor.
9. Read, evaluate, and construct a phylogenetic tree.

## GENERAL EDUCATION STUDENT LEARNING OUTCOMES

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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.

The General Education objectives and the associated Student Learning Outcomes for Biological Sciences are achieved through inquiry-based and active-learning exercises in the laboratory, including prelab assignments, experimental design, quizzes, oral presentations, and completion of weekly lab notes and data sheets. These exercises are designed to reinforce, augment, and accompany learning objectives in the companion BSC 2010 lecture course. In particular, the BSC 2010L lab exposes students to the development and testing of specific hypotheses, collection and presentation of biological data, and analysis of statistical significance.

## COURSE EXPECTATIONS

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Each student is solely responsible for reading and following the instructions, guidelines, and schedules in this syllabus. Not having read the information in this syllabus or in instructor announcements will not constitute an excuse for missing an assignment or other assessment.

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.

### III. COURSE POLICIES

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As part of BSC 2010L, you are required to complete online assignments. If at any time you have questions about these assignments, please contact the Online Instructor. A schedule will be posted on e-Learning with the due dates for each assignment. All assignments must be completed by the stated due date and time for credit. No credit will be given for assignments completed after the deadline. Extensions will NOT be given because of technical or personal issues that occur within 24 hours of the assignment deadline. Many assignments may take several days to complete, so make sure you have time to devote to that assignment before you begin. You are expected to work by yourself on the assignments and cheating will not be tolerated. Note that all due dates for assignments are clearly posted on the course website and reflect the most up-to-date information.

#### ATTENDANCE

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Students are expected to check the Canvas course regularly for announcements, assignment due dates, and other course-related information. Students are to complete all assigned work (quizzes, activities, etc.) by the due dates. Students are strongly encouraged to read the assigned chapters before attempting any of the assignments as this will make it easier to comprehend the material.

Requirements for class attendance and make-up exams, assignments, and other work in the course are consistent with university policies. See <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/> for more information regarding the University Attendance Policies.

#### TIME COMMITMENT

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The University of Florida 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 2011L is 1 credit, each student should therefore expect to devote 3-4 hours per week to this course during a regular semester. A recommended time allocation is in the table.

Activity	Hours/Week
Readings	1
Lab Activities	2-3

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. 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.

#### COMMUNICATION WITH YOUR ONLINE INSTRUCTOR

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When you have a question about the assignments, check the following sources first to see if it is already answered, before e-mailing your Online Instructor:

- **Course Syllabus**
- **e-Learning Announcements** (this is the primary means that your Online Instructor has to communicate with you in a timely manner)
- **Lab Q&A Discussion Boards**
  - In each lab, there is a Lab Q&A discussion board. This is where you can post questions to other students, the instructor, and to the TAs about that particular lab. Any questions regarding the material or the online assignments should be posted there so that your instructors or your fellow students will be able to provide answers. Do not be shy about asking questions; if you are confused about the material there will certainly be other students with the same questions.

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 on the e-Learning Lab Q&A discussion board.
- If it is a question specific to you (e.g., account or grade-specific), message your instructor. Barring unusual circumstances, expect a reply within 24 hours (48 hours on weekends).

E-mails and e-Learning discussion posts are checked at least once per day, but sometimes not more than that.

## COURSE ACTIVITIES

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Class materials will be posted on the course e-Learning website (<https://elearning.ufl.edu/>). The course is found under “e-Learning in Canvas.” You are responsible for all Announcements posted on the course website for this class. Each lab will begin on a Friday and close on the second Monday at 11:59 pm EDT/EST.

There are several different types of assignments that students will have to complete. For most assignment types (activities, tutorials, etc.) you will receive a grade based on the grading rubric provided. Once assigned, assignments are always available online up until the deadlines. Because they are assigned well ahead of time, documentation of illness or a serious personal matter must be provided for at least five of the seven days of the week of the assignment’s deadline for any accommodation to be made. It is especially important not to wait until just before the deadlines to complete assignments. A computer problem happening just before the deadline is not a valid excuse for not completing the assignment. If there is a technical problem with accessing the website or a particular assignment within Canvas, you must contact eLearning technical support and the online instructor at least 48 hours prior to the deadline, so appropriate steps can be taken to fix the issue and appropriate extensions can be given if necessary. (Thus, check early that you can access the assignments. You will not be granted an extension for technical problems if you do not contact the online instructor before the deadline.) It is best to get your assignments done at least two days early. It is your responsibility to have and maintain all the equipment and services necessary to participate in an online course.

**Repeated for emphasis: technical problems must be reported to the online instructor at least 48 hours prior to the submission deadline, no exceptions!**

## Lab Readings

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Lab background readings and manuals will be available in your Canvas course.

## Pre-Lab Quizzes

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Pre-lab quizzes will be due on Monday at 11:59 pm EDT/EST. All readings should be done prior to completing the pre-lab quiz. Pre-lab quizzes are worth 10 points. In eScience, the pre-lab quiz questions are named “Exploration: Test Your Knowledge” and “Exploration: Question Time.”

## Lab Activities and Discussions

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All individual lab activities must be completed/turned in by Friday at 11:59 pm EDT/EST. In eScience, the individual lab activities are named “Experimentation.” Discussion-related activities (all in Canvas) may have multiple due dates, please read the discussion description for more information. Due dates are set for the initial posts.

All discussions must take place on Canvas on the appropriate Discussion Board. Discussions outside of Canvas will not be graded, and caution is advised when other platforms are used (see the section on Academic Conduct below).

## Post-Lab Quizzes

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Post-lab quizzes are due on Monday at 11:59 pm EDT/EST. In eScience the post-lab quiz questions are named “Evaluation: Competency” and “Evaluation: Extension Questions.” All lab activities should be done prior to completing the post-lab.

## COURSE GRADING

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Assignment totals are subject to change at the discretion of the instructor. All grades will be posted on e-Learning, and it is the responsibility of the student to check their grades to make sure they are accurate. If there is a discrepancy, you must let us know within ONE week of the grade being posted on e-Learning.

The Orientation Module is worth 5% of your overall score. Labs 1 through 11 are weighed equally: each are worth 8.5% of your overall score.

The minimum grade cutoffs are listed to the right. These cutoffs will not be raised; in other words, if you receive 94% 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
≥ 94	A
≥ 90	A–
≥ 87	B+
≥ 84	B
≥ 80	B–
≥ 77	C+
≥ 74	C
≥ 70	C–



Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page: [Grades and Grading Policies](#). 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.**

## PARTICIPATION

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Some labs require you to discuss answers in groups. You must adhere to the netiquette policies outlined below. There are rubrics for discussions, but keep in mind that posts should make educated initial posts about the topic and properly cite sources and provide constructive criticism and feedback for groupmates' posts.

## CLASS DEMEANOR OR NETIQUETTE

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All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. Review the [Netiquette Guide for Online Courses](#) for expected student behavior.

When posting on the Discussion Board in your online class, you should:

- Make posts that are on-topic and within the scope of the course material.
- Take your posts seriously and review and edit your posts before sending them.
- Be as brief as possible while still making a thorough comment.
- Always give proper credit when referencing or quoting another source.
- Be sure to read all messages in a thread before replying.
- Do not repeat someone else's post without adding something of your own to it.
- Avoid short, generic replies such as, "I agree." You should include why you agree or add to the previous point.
- Always be respectful of others' opinions even when they differ from your own.
- When you disagree with someone, you should express your differing opinion in a respectful, non-critical way.
- Do not make personal or insulting remarks.
- Be open-minded.

## COURSE TECHNOLOGY REQUIREMENTS

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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.

Papers required for assignments can be found in the Course Reserves. You cannot access the Course Reserves link if using a Chrome browser. You will have to use Firefox, or alternatively you can access them directly from the ARES site of the UF Library. You may have to be on the UF VPN network.

## LATE WORK

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Late work will not be accepted, unless there is written documentation from the Dean of Students Office (<https://care.dso.ufl.edu/instructor-notifications/>), or due to a documented technical issue. You should submit the documentation to the DSO first and THEN email me saying that you have sent in the documentation. Do NOT submit any documentation to me. It is up to the student to make sure that I receive the notification from the DSO in a timely fashion (within five business days of the absence). If there is an issue with you completing your assignments on time, contact your instructor immediately. Do not wait until the last minute!

## MAKE-UPS

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There are no alternative assignments available for the work. Once assigned, assignments are always available online up until the deadlines. Because they are assigned well ahead of time, documentation of illness or a serious personal matter must be provided for at least five of the seven days of the week of the assignment's deadline for any accommodation to be made. It is especially important not to wait until just before the deadlines to complete assignments. A computer problem happening just before the deadline is not a valid excuse for not completing the assignment. If there is a technical problem with accessing the website or a particular assignment within CANVAS, you must contact eLearning technical support and the online instructor at least 48 hours prior to the deadline, so appropriate steps can be taken to fix the issue and appropriate extensions can be given if necessary. (Thus, check early that you can access the assignments. You will not be granted an extension for technical problems if you do not contact the online instructor before the deadline.) It is best to get your assignments done at least two days early. It is your responsibility to have and maintain all the equipment and services necessary to participate in an online course.

Repeated for emphasis: Technical problems must be reported to the online instructor at least 48 hours prior to the submission deadline, no exceptions!

## DROP/ADD/WITHDRAWAL

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A student can drop/add 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.

## COURSE EVALUATIONS

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Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online. Students can complete evaluations in three ways: 1) the email they receive from GatorEvals; 2) their Canvas course menu under GatorEvals; or 3) the central portal at <https://my-ufl.bluera.com>. Guidance on how to provide constructive feedback is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

## IV. UF POLICIES

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UF Online students are bound by the same UF policies as on-campus students. Please read this section in full.

### UNIVERSITY POLICY ON ACADEMIC CONDUCT

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UF students are bound by The Honor Pledge which states “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the UF Conduct Code website (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) for more information. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Use of GroupMe, Discord, and similar group chats facilitate communication and can be an important part of creating community in a course, especially an online course. However, such groups typically exclude instructional staff and present great temptation for unauthorized academic dishonesty as described above. In this course, the use of GroupMe, etc. to share answers, screenshots of quizzes, “compare” work, etc. is not authorized. Discussion of exam content, questions, in any fashion, on any medium, will be reported via the SCCR process and if a student is found responsible, the instructor will impose a sanction, such as a 0 on the assignment or exam, plus a full letter grade decrease for the course. Instructors will monitor the discussion boards on Canvas, and authoritative answers to questions about material or course mechanics can be found there.

### ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

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Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. See “Get Started With the DRC” Disability Resource Center webpage (<https://disability.ufl.edu/get-started/>). It is important for

students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

No accommodation is 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 Dean of Students Office of Disability Resources will work with the instructor to accommodate the student. Accommodations are not retroactive.

## MINIMUM TECHNOLOGY REQUIREMENTS

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The University of Florida expects students entering an online program to acquire computer hardware and software appropriate to his or her degree program. Most computers are capable of meeting the following general requirements. A student's computer configuration should include:

- Webcam
- Microphone
- Broadband connection to the Internet and related equipment (Cable/DSL modem)
- Microsoft Office Suite installed (provided by the university)

Individual colleges may have additional requirements or recommendations, which students should review prior to the start of their program.

## SOFTWARE USE

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All faculty, staff, and students at 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.

## V. TECHNOLOGIES

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This course uses the following technologies.

### ESCIENCE (SCIENCE INTERACTIVE)

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Science Interactive is an online platform that allows students to engage in hands-on and digital labs. You will purchase a kit for this lab, as well as access to the eScience platform. More details can be found in Canvas in the Orientation Module.

For further information, FAQs, and technical support, please visit [Science Interactive Support](#).

## ZOOM

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Zoom is an easy-to-use video conferencing service available to all UF students, faculty, and staff that allows for meetings of up to 100 participants.

You can find resources and help using Zoom at <https://ufl.zoom.us>.

## VI. GETTING HELP

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Resources are available at [Distance Learning's Getting Help](#) for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints about your experience in this course, please visit [Distance Learning's Student Complaint Process](#) to submit a complaint.

College can be an incredibly stressful time in a person's life. Resources are available on campus to help students meet academic goals and solve personal problems, which 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 one of the following services:

- UF Counseling and Wellness Center, Radio Rd Facility, 392-1575
- Dean of Students Office, 202 Peabody Hall, 392-1261
- Career Resource Center, Reitz Union, 392-1601
- CLAS Academic Advising Center, Farrior Hall, 100 Fletcher Drive, 392-1521
- 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.

## TECHNICAL DIFFICULTIES

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For issues with technical difficulties for Canvas, please contact the UF Help Desk at <http://helpdesk.ufl.edu> or (352) 392-HELP (4357).

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

## HEALTH AND WELLNESS

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- **U Matter, We Care:** If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [umatter.ufl.edu](http://umatter.ufl.edu) to refer or report a concern and a team member will reach out to the student in distress.
- **Counseling and Wellness Center:** Visit [counseling.ufl.edu](http://counseling.ufl.edu) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need or visit [shcc.ufl.edu/](http://shcc.ufl.edu/).
- **University Police Department:** Visit [police.ufl.edu](http://police.ufl.edu) or call 352-392-1111 (or 9-1-1 for emergencies).
- **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; [ufhealth.org/locations/uf-health-shands-emergency-room-trauma-center/](http://ufhealth.org/locations/uf-health-shands-emergency-room-trauma-center/).

## ACADEMIC AND STUDENT SUPPORT

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- **Career Connections Center:** 352-392-1601. Career assistance and counseling services: [career.ufl.edu/](http://career.ufl.edu/)
- **Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources: [uflib.ufl.edu/](http://uflib.ufl.edu/)
- **Teaching Center:** 352-392-2010 General study skills and tutoring: [academicresources.clas.ufl.edu/](http://academicresources.clas.ufl.edu/)
- **Writing Studio:** 352-846-1138. Help brainstorming, formatting, and writing papers: [writing.ufl.edu/writing-studio/](http://writing.ufl.edu/writing-studio/)

## VII. PRIVACY AND ACCESSIBILITY POLICIES

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For information about the privacy policies of the tools used in this course, see the links below:

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>
OpenStax	<a href="#">Privacy Policy</a>	<a href="#">Accessibility</a>
eScience	<a href="#">Privacy Policy</a>	<a href="#">Accessibility</a>

## VIII. COURSE SCHEDULE

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The general schedule for a one-week lab is as follows (students should check each lab module as this can vary depending on the requirements for the lab):

- Lab will open Friday at 12 am.
- Pre-lab quiz due Monday at 11:59 pm.
- Due by the following Friday at 11:59 pm:
  - Initial group discussion post
  - Individual assignments
- Due by the following Monday at 11:59 pm:
  - Discussion responses (you should be discussing throughout the weekend so people can respond)
  - Post-lab quiz

Module Subject	Available Dates	Learning Activities	Assessments
0: Orientation	8/21 – 9/8	<p><b>Readings:</b> Course Overview; Syllabus, FAQ page; Science Interactive (eScience)</p> <p><b>Lectures:</b> Course Orientation (6:24)</p>	<p><b>Individual Assignments:</b> SI Orientation: Getting Started; SI Orientation: Lab Safety; SI Orientation: Lab Kit Inventory (due 9/26)</p> <p><b>Discussions:</b> Introduce Yourself (initial post due 8/29, responses 9/2)</p> <p><b>Quizzes:</b> Course Orientation Quiz</p>
1: Scientific Inference	9/5 – 15	<p><b>Readings:</b> OpenStax Chapt. 1.1; Variable Types; Summarizing Your Data; Variance and Standard Deviation, Intro to Stats Lab Background; How to Make Graphs Lab Background</p> <p><b>Lectures:</b> Scientific Inference (2:28)</p>	<p><b>Individual Assignments:</b> Scenarios</p> <p><b>Discussions:</b> Scenarios Group Discussion (initial post due 9/12, responses 9/15)</p> <p><b>Quizzes:</b> Lab 1 Pre-Lab Quiz (due 9/8); Lab 1 Post-Lab Quiz (due 9/15)</p>
2: Enzyme Kinetics	9/12 – 22	<p><b>Readings:</b> OpenStax Chapt. 6.5</p> <p><b>Lectures:</b> Enzyme Kinetics (3:28); Demo: Enzyme Kinetics (13:35)</p>	<p><b>Individual Assignments, Quizzes:</b> eScience Enzyme Kinetics</p>
3: Cellular Respiration and Fermentation	9/19 – 29	<p><b>Readings:</b> OpenStax Chapt. 7</p> <p><b>Lectures:</b> Cellular Respiration and Metabolism (3:05)</p>	<p><b>Individual Assignments, Quizzes:</b> eScience Cellular Respiration and Fermentation</p>
4: Mendelian Inheritance	9/26 – 6	<p><b>Readings:</b> OpenStax Chpts. 12.1, 12.2, 12.3</p> <p><b>Lectures:</b> Mendelian Inheritance (7:34)</p>	<p><b>Individual Assignments, Quizzes:</b> eScience Mendelian Inheritance</p>
5: Experimental Genetics	10/3 – 13	<p><b>Readings:</b> OpenStax Chpts. 12.1, 12.2, 12.3; Cat Coat Genetics Lab Background</p> <p><b>Lectures:</b> Cat Coat Genetics (9:39)</p>	<p><b>Individual Assignments:</b> Cat Coat Genetics</p> <p><b>Discussions:</b> Cat Coat Genetics File Sign Up (due 10/13)</p> <p><b>Quizzes:</b> Lab 5 Pre-Lab Quiz (due 10/6); Lab 5 Post-Lab Quiz (due 10/13)</p>
6: Biomolecular Techniques	10/10 – 20	<p><b>Readings:</b> OpenStax Chapt. 17.1</p> <p><b>Lectures:</b> Biomolecular Techniques (5:47); Demo: Biomolecular Techniques (6:47)</p>	<p><b>Individual Assignments, Quizzes:</b> eScience Biomolecular Techniques</p> <p><b>Quiz:</b> Mid-Course Survey</p>



Module Subject	Available Dates	Learning Activities	Assessments
*7: Natural Selection: Salinization of Soils	10/16 – 27	<b>Readings:</b> Khan Academy: Tolerance Range of Species, Evolution; OpenStax Chapt 44.2; Primary Sources in the Sciences <b>Lectures:</b> Salinization of Soils (5:02); Demo: Soil Salinization (7:22)	<b>Individual Assignments, Quizzes:</b> eScience Salinization of Soils
**8: Population Genetics	10/24 – 11/3	<b>Readings:</b> OpenStax Chpts. 18.1, 19.1, 19.2, 20 <b>Lectures:</b> Population Genetics (21:34)	<b>Individual Assignments:</b> Genetics Individual Assignment (Part IV) <b>Group Assignment:</b> Genetics Data Spreadsheet Group Assignment (Part II) (due 10/29) <b>Discussions:</b> Genetics Data Share Group Discussion (Part I) (due 10/28); Gene Selection Group Discussion (Part III) (due 10/29); HWE Calculations Group Discussion (Part V) (initial post due 10/31, responses 11/3) <b>Quizzes:</b> Lab 8 Pre-Lab Quiz (due 10/27); Lab 8 Post-Lab Quiz (due 11/3)
9: Evolution and Genetic Drift	10/31 – 11/10	<b>Readings:</b> OpenStax Chapt. 19 <b>Lectures:</b> Evolution and Genetic Drift (5:15)	<b>Individual Assignments:</b> Genetic Drift Individual Assignment <b>Discussions:</b> Evolution in Populations Group Discussion (initial post due 11/6, responses 11/10) <b>Quizzes:</b> Lab 9 Pre-Lab Quiz (due 11/3); Lab 8 Post-Lab Quiz (due 11/10)
10: Cladistics	11/7 – 17	<b>Readings:</b> OpenStax 18.1., 20.1, 20.2; Taxonomy Lab Background <b>Lectures:</b> Cladistics (5:08)	<b>Individual Assignments:</b> The Great Clade Race Individual Assignment <b>Quizzes:</b> Lab 10 Pre-Lab Quiz (due 11/7); Lab 8 Post-Lab Quiz (due 11/17); End of Course Survey

NOTES: \*Lab 7 requires five consecutive days of data collection. Do not wait to start this lab! \*\*Lab 8 has multiple small group discussions to coordinate group submissions. Be aware of this.

## VIV. DISCLAIMER

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