

BSC 2011L – Integrated Principles of Biology Lab 2

Syllabus for online course

Spring 2019 semester

I. Class Meetings

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

II. BSC Lecture Courses

The BSC Online Lecture course (BSC 2011) is a separate course from the BSC Online Lab course.

III. Instructors

Professor:

Stefanie Gazda, Ph.D.

Stefanie.gazda@ufl.edu

Office Hours: Wed/Thur 9:30 -11:00 am and
by appointment

Office hours will be held on online and via email. Please make an appointment for an in-person meeting.

Teaching Assistants:

TAs (and their Office Hours) will be posted on Canvas by the start of the course.

IV. 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:

- Form scientific hypotheses, develop testable predictions, and design experiments to test hypotheses
- Understand the importance of statistics in scientific sampling, discriminate between descriptive and inferential statistics and correctly identify situations in which the use of each is appropriate, understand the meaning of statistical significance, interpret statistic results and draw appropriate conclusions from them
- Select the appropriate type of graph to illustrate patterns in data based on hypothesis
- Create graphs that display data in a meaningful way and appropriately labeled
- Interpret data and draw conclusions based on concepts learned in BSC2010 and BSC2011
- Identify the primary structural elements of various plant groups, their associated functions, and explain the processes of plant growth and structural development
- Define sexual reproduction and explain the general reproductive life cycles of plants and animals
- Describe the major patterns and developments in the evolution of plant clades
- Identify the primary organs of a representative mammal and their associated functions

- Read, evaluate, and construct a phylogenetic tree
- Compare and contrast changes in human population growth over the past 150 years using survivorship data
- Evaluate the impact of diversity on ecosystem function
- Compare changes in land and ocean surface temperature of the past century
- Identify and evaluate current and projected impacts of climate change

V. General Education Student Learning Outcomes

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 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 2011 lecture course. In particular, the BSC 2011L lab exposes students to the development and testing of specific hypotheses, collection and presentation of biological data, and analysis of statistical significance.

VI. Expectations

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.**

VII. E-mail Communication

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.

VIII. Course Resources

A. Lab Manual

Lab manual readings will be available in your Canvas course.

B. Carolina Biological Supply

Part of your assignments will be completed using materials from Carolina Biological kits. Information on how to order these kits will be posted on Canvas. You are required to have the kits by the third week of January. **No extensions will be granted if you cannot get the kits in time to start the Module.**

C. Textbook

Principles of Life, 2nd Edition, by Hillis, Sadava, Heller, & Price, Sinauer Associates and

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

D. Course Website (e-Learning)

Class materials will be posted on the course e-Learning website (<http://lss.at.ufl.edu>). The course is found under “e-Learning in Canvas”. You are responsible for **all** Announcements made in lecture and/or posted on the course website for this class. For help with e-Learning, call the UF Computing Help Desk at 352-392-4357, or visit the e-Learning support website: <https://lss.at.ufl.edu/help.shtml>

IX. Online Instruction Information

As part of BSC 2011L, 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. Extensions will NOT be given because of technical or personal issues that occur within 24 hours of the assignment deadline.** Many assignments will also have a set time limit, 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.

General Module Questions:

In each Module there is an area called “General Module Questions”. This is where you can post questions to other students, me, and to the TAs about that particular Module. 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. 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.

Communication with Your Online Instructor:

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)
- e-Learning Study Room Posts

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 e-Learning Module Study Room section at the end of the Module in question.
- If it is a question specific to you (e.g. account or grade specific), e-mail your instructor. Barring unusual circumstances, expect a reply with 24 hours (48 hours on weekends). E-mails and e-Learning Module posts are checked at least once per day, but sometimes not more than that.

Grading of Online Exercises:

Each lab will begin on a Monday and close on Sunday. Some labs have a two-week component, in which case each part will adhere to this schedule.

- *Pre-Lab:* Pre-labs will be due on Wednesday at 11:59pm EDT/EST. All readings should be done prior to completing the pre-lab.
- *Lab Activities:* All lab activities must be completed/turned in by Sunday at 11:59pm. If

it is a two-week long lab, then only the part assigned for that week will be due. If a post-lab activity is assigned, it is due at the same time as the lab activities.

- *Participation:* 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 1) make educated initial posts about the topic and properly cite sources, and 2) provide constructive criticism and feedback for groupmates' posts.

Late work will not be accepted, unless there is written documentation from a doctor, the Dean of Student s Office, or due to a documented technical issue. If there is an issue with you completing your assignments on time, contact your instructor immediately. Do not wait until the last minute!

There are no make-ups available for assignments. Once assigned, assignments are available online at all times 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 accommodations 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!

X. 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."

Cases of plagiarism or other academic dishonesty will not be tolerated, and may result in grade penalties or other sanctions. In this course, academic dishonesty includes (but is not limited to) collaborating with other students on course assignments, discussing quiz questions or answers with other students, giving other students the password for locked quizzes, and plagiarism. 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). You are expected to review and abide by the University of Florida

Academic Honesty Guidelines at:

<https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty>.

XI. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information. When possible, the student should provide documentation of a requirement for accommodation to the instructor by the second week of classes. No accommodations are available to students who lack this documentation, and accommodations are not retroactive. 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.

XII. Counseling Center and 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, 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, Farrison 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.

XIII. Schedule and Grading

Module	Start	End	Subject
0	Jan 6	Jan 20	Getting Started (no credit; complete to access Module 1)
1	Jan 13	Jan 27	Science and Statistical Inference (2 weeks)
2	Jan 27	Feb 3	Photosynthesis (<i>requires Carolina Biological kit</i>)
3	Feb 3	Feb 10	Plant Structure and Function (<i>requires Carolina Biological kit</i>)
4	Feb 10	Feb 17	Plant Reproduction
5	Feb 17	Feb 24	Sensory Physiology
6	Feb 24	Mar 3	Comparative Anatomy (<i>requires Carolina Biological kit</i>)
	Mar 3	Mar 10	SPRING BREAK
7	Mar 10	Mar 17	Animal Tissues (<i>requires Carolina Biological kit</i>)
8	Mar 17	Mar 24	Population Ecology
9	Mar 24	Mar 31	Species Richness & Ecosystem Function
10	Mar 31	April 7	The Changing Climate

Assignment totals are subject to change at the discretion of the instructor. Each graded Module is worth 10% of your grade. 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.

Minimum grade cutoffs are listed to the right. Because each exam may be curved individually (see section X-A, above), the scores for the course as a whole will not be scaled (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%).

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>

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–

IV. Other Information

Attendance: Students are expected check the course website regularly for announcements, assignment due dates, and other course related information. Students are to complete all assigned work (quizzes, activities, discussions, and exams) by the due date. 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.

Drop/Add/Withdrawal: 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: Anonymous course evaluations will be open via UF’s online evaluations system near the end of the semester; you will receive e-mail notification of when the evaluations open. We do consider student feedback when planning future semesters; please let your instructors know if there are particular modules and/or activities that you found helpful or that you would have liked to cover in more depth, as well as any that you found less useful.