

# Integrated Principles of Biology 2 Syllabus – Spring 2020

BSC2011 ONLINE ONLY

## I. INSTRUCTOR INFORMATION

---

### Professor:

Stefanie Gazda, Ph.D.

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

Office Hours: **Wed/Thur 9:30 -11:00 am** and  
by appointment online or in person in Bartram  
214A.

### Teaching Assistants:

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

*Office hours will be held via Zoom*

## II. COURSE INFORMATION

---

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

## COURSE 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.

## COURSE TEXTBOOK

---

Principles of Life, 2nd Edition, by Hillis, Sadava, Heller, & Price, Sinauer Associates and MacMillan (publisher). An e-book is included with LaunchPad.

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

## ONLINE RESOURCES AND ELECTRONIC TEXTBOOK

---

LaunchPad is an online assignments and tutorial system from the textbook publisher. It is required for this course and includes an e-book with purchase. Each new copy of the Principles of Life textbook comes automatically packaged with LaunchPad and an e-book. Instructions on how to access LaunchPad and connect your account can be found in the Orientation Module in Canvas.

If you have problems registering, purchasing, or logging in, please contact Customer Support at <https://community.macmillan.com/community/digital-product-support>. You can reach a representative 7 days a week through the online form, by chat, or by phone at (800) 936-6899.

For LaunchPad accessibility and privacy information, please review the [Macmillan Learning Accessibility](#) and [Macmillan Learning Privacy and Cookie Notice](#) pages.

## UF ALL ACCESS

---

Please note that this course will be participating in the UF All Access program for the Spring 2020. Students will be able to opt-in to the REQUIRED access to Launchpad with eBook access for Principles of Life when classes begin and pay for these materials through their student account. Students who do not choose to “opt-in” will be able to purchase a standalone Launchpad code with eBook access through the UF Bookstore or online through the Launchpad site. Both options provide access to the same material, however opting-in will provide the course materials at the lowest price. There will also be a loose- leaf print version of the textbook available at the UF Bookstore for students who wish to have a physical copy of the text as a companion to the required online materials.

## COURSE DESCRIPTION

---

Laboratory experiments are designed to accompany BSC 2011. The BSC Online Lecture course (BSC 2011) is a separate course from the BSC Online Lab course.

## PREREQUISITE KNOWLEDGE AND SKILLS

---

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

## 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. 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:

1. Describe a scientific hypothesis and identify testable predictions that logically follow.
2. Read and evaluate a phylogenetic tree.
3. Describe the origin of photosynthesis in plants and the traits that enabled plants to diversify on land.
4. Discuss the potential adaptive significance of synapomorphies that define major clades of plants.
5. Explain how the alternation of generations varies among plant lineages and its significance in plant reproduction.
6. Discuss the role of hormones in plant development and environmental response.
7. Explain major themes to animal physiology and how it is linked with medicine.
8. Explain physical principles governing gas exchange in animals in air and water.
9. Diagram blood flow through the vertebrate circulatory system and describe the major functions of blood vessel types.
10. Diagram the arrangement of major proteins governing muscle contraction and describe excitation contraction coupling.
11. Describe the principles of electrical signals in neurons and diagram the organization of the vertebrate nervous system.
12. Explain principles governing how nitrogen waste is processed in animals and how salt and water balance are maintained in animals.
13. Describe and explain how climate and topography shape ecological systems.
14. Identify, compare, and contrast major terrestrial and aquatic biomes.
15. Describe how species interactions can influence fitness, population dynamics, and species distribution and can result in evolutionary change.
16. Explain how communities change over space and be able to calculate species diversity.
17. Diagram the global carbon and nitrogen cycle and identify the major stocks and fluxes.
18. Identify major anthropogenic changes to the carbon, nitrogen, and phosphorus cycles and describe how these changes have altered ecological systems.

## **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 student learning outcomes (SLOs) describe the knowledge, skills and attitudes that students are expected to acquire while completing a general education course at the University of Florida. The SLOs fall into three categories: **content**, **communication**, and **critical thinking**.

**Every general education course must address all three SLOs.** Note that the subject area objectives (detailed above) describe the context within which the SLOs are achieved.

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

To assess student performance in meeting these student learning outcomes for this course, students are evaluated by a variety of instruments throughout the course: three exams during the semester, short comprehension check quizzes used to assess comprehension and reasoning, and graded on-line activities, exercises and assessments. Student Learning Outcomes are further assessed in BSC 2011L, the companion lab course. In combination, BSC 2011 and BSC 2011L provide assessments of all categories of the General Education Student Learning Outcomes.

## COURSE 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.

## III. COURSE POLICIES

---

As part of BSC 2011, 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

---

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, and discussions) 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.

## TIME COMMITMENT

---

The UF College of Liberal Arts and Sciences assumes that each student will devote 3-4 hours per week per credit-hour to each course, including time in lectures and labs. Because BSC 2011 is 3 credits, each student should therefore expect to devote 9-12 hours per week to this course during a regular semester, or 11-15 hours per week during the summer. A recommended time allocation is in the table. 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.

Activity	Hours/Week
Lectures/Videos	1
Online Exercises	2-4
Textbook Readings	2-3
Review and Study	2-4

## 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 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; do not expect an immediate response in the evenings). E-mails and e-Learning Discussion posts are checked at least once per day, but sometimes not more than that.

## COURSE ACTIVITIES AND MATERIALS

---

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. **There are no make-ups available for assignments.** 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 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!**

### Exams

---

There will be three "midterm" exams, but no cumulative "final" exam. Each exam will cover material from video lectures, comprehension checks, learning activities, the online discussions, and the assigned reading in the textbook.

All exams will be multiple-choice and will be administered using HonorLock. You will have to download an extension for your browser, and you can only use Chrome. For detailed instructions about HonorLock go to the "HonorLock" tab in the "Start here" section on the course website.

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

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

## Make-up Exams

---

No make-up exams will be given without prior permission or documentation of illness. Students that will be missing an exam due to a pre-arranged university-approved excused absence (sports, etc.) should let the instructor know a minimum of two weeks in advance. These students may be required to take the make-up exam before the scheduled in-class exam.

In case of illness on exam day, a letter from the student's primary care provider is required. This letter must state that the student was unable to complete the exam on the scheduled date (i.e., a letter stating only that the student was seen in a clinic is not sufficient) and must go through the Dean of Students Instructor Notification system (<https://care.dso.ufl.edu/instructor-notifications/>). A personal matter must also go through the same process. These notes must be received within five business days after the exam. Make up exams may be short-answer or essay format.

## Comprehension Checks

---

Each module will contain 2-3 comprehension checks. These checks will require you to read, watch videos, and/or complete an exercise from the book. You will then answer questions by taking a quiz in Canvas. You will be graded based on number of questions answered correctly out of total number of questions on the quiz. You will have TWO chances to complete the quiz. Your final quiz grade will be the HIGHEST score from the two quiz submissions.

## Learning Activities

---

Each module will contain 1-3 learning activities. These assignments, unless otherwise stated, will be graded based on the specific grading rubric for each assignment. Rubrics for each assignment are available in their module section. It is advisable to look at the rubrics prior to submitting your assignment to make sure you have included all the required information for the assignment. File uploads, if required, should be in PDF format.

You will complete these activities in groups or individually. For group activities, these assignments will require you to either post a question or comment to the discussion board in Canvas and then respond to peers' posts OR participate in a group discussion and submit answers to an assignment as a group. Each discussion assignment will indicate which format should be used.

## LaunchPad

---

LaunchPad is an online assignment and tutorial system from the textbook publisher. It is required for this course. Each new copy of the Principles of Life textbook comes automatically packaged with LaunchPad. If you purchase a used textbook you will still need to purchase access to LaunchPad. You

are required to have access to LaunchPad for the ENTIRE course. It is your responsibility to ensure that your access DOES NOT expire before the end of the semester.

## Peer Review

---

Some group work will require you to evaluate each other. This is a critical component. Assignments requiring Peer Review will indicate as such in the directions. Peer Reviews are automatically assigned by Canvas, typically 24 hours before the Module closes. You will have 48 hours to complete the Peer Review.

Reviews are ONLY assigned to students that have participated in the activity by the due date. Students cannot be assigned Peer Reviews manually; if you are not assigned a Peer Review due to late submission, you will not get credit for either the assignment (see above) or the Peer Review. More information on how to access Peer Reviews can be found in Canvas.

## Study Rooms

---

To facilitate actual discussion beyond the required assigned group discussions, a “Study Room” will be set up in e-Learning in Canvas at the end of each module. Any questions regarding the lecture material or the online assignments should be posted there, so that your instructors, or your fellow students will be able to provide answers. Don’t be shy about asking questions; after all, if you are confused about the material there will almost certainly be other students with the same questions.

**I DO NOT GIVE OUT EXTRA CREDIT!** If you would like to earn more points towards your score, the best way to do this is to participate more. The more Study Rooms that you participate in, the more credit (up to 5% of your total grade) you can earn. Participation should be of quality: repeated questions already answered, or questions asked within three hours of the closing of the Study Room (thus not allowing sufficient time to be answered) do not count. Posts that do not follow the Netiquette policies do not count as participation.

## PARTICIPATION

---

Group assignments 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.

## Netiquette

---

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.
- Don't 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.

## COMPUTING REQUIREMENTS

---

It is the responsibility of the student to maintain a functioning computing system and internet connection that can meet the minimum requirements of the course. These requirements can be found in the Orientation Module in Canvas.

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. See Resources for Technical Support contact information.

Microsoft Office programs are required for many of the assignments; it can be accessed by current UF students through GatorCloud.

## LATE WORK

---

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. 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

---

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!

## 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

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/>.

## IV. UF POLICIES

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

### UNIVERSITY POLICY ON ACADEMIC CONDUCT

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 honesty 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 [Student Honor Code](#) specifies the number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

## ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

---

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc](http://www.dso.ufl.edu/drc)) by providing appropriate documentation. Once registered, students will receive an accommodation letter that must be presented to the instructor when requesting an accommodation. Note that the student should provide documentation of a requirement for accommodation **by the second week of classes**. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student. Accommodations are not retroactive.

## CLASS DEMEANOR OR NETIQUETTE

---

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.

## SOFTWARE USE

---

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

## V. TECHNICAL SUPPORT AND SUPPORT SERVICES

---

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.

## VI. SUPPORT SERVICES

---

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 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, 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.

## VII. SCHEDULE AND GRADING

---

Module	Start	End	Subject
0	Jan 6	Jan 19	Orientation (Complete to access Module 1)
1	Jan 12	Jan 19	Evolution of Land Plants
2	Jan 19	Jan 26	Plant Reproduction
3	Jan 26	Feb 2	Plant Nutrition and Transport
4	Feb 2	Feb 9	Plants and their Environment
Exam 1	Feb 11	Feb 12	Exam 1
5	Feb 9	Feb 16	Nutrition and Digestion
6	Feb 16	Feb 23	Breathing and Circulation

Module	Start	End	Subject
7	Feb 23	Mar 1	Musculoskeletal System and Endocrinology
	Mar 1	Mar 8	SPRING BREAK
8	Mar 8	Mar 15	Nervous System
9	Mar 15	Mar 22	Immunology and Endocrinology
10	Mar 22	Mar 29	Reproduction and Development
Exam 2	Mar 31	April 1	Exam 2
11	Mar 29	Apr 5	Distribution of Ecological Systems
12	Apr 5	Apr 12	Organisms and Populations
13	Apr 12	Apr 19	Interactions and Communities
14	Apr 19	Apr 26	Ecosystems and Global Change
Exam 3	Apr 28	Apr 29	Exam 3

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.

Assignments	Percentages
Exams (3)	37.5 % (12.5% each)
Comprehension Checks	12.5 %
Individual Assignments	17.5%
Group Assignments	15%
LaunchPad	12.5%
Peer Reviews	5%
Study Rooms	5% (Extra Credit)

The minimum grade cutoffs are listed below. These cutoffs will not be raised; in other words, if you receive 90% of the possible points, you are guaranteed to earn an A grade. Final scores will NOT be rounded (i.e., 89.99% is not 90%).

Point Range (%)	Letter Grade
≥ 90.00	A
≥ 86.66	A-

Point Range (%)	Letter Grade
≥ 83.33	B+
≥ 80.00	B
≥ 76.66	B–
≥ 73.33	C+
≥ 70	C
≥ 66.66	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**. Plan to do well on all exams and other assessments from the beginning of the semester; if you are having difficulty in the class, please let your instructors know *before* the exams rather than after.

## VIII. DISCLAIMER

---

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.