



BSC 1005: Biological Principles
Spring 2019 Syllabus
College of Science, Dept. of Biology

Instructor: Dr. Melinda Donnelly

Lecture Location: Classroom Building 1, room 121

Lecture Days and Time: MWF 1:30-2:20 pm

Instructor Contact Information

E-mail: Melinda.Donnelly@ucf.edu

Office Hours: Mondays and Wednesdays: 10:30 am to 12:30 pm

*if you cannot make these times, please contact me by email to schedule an appointment

Office Location: Biological Sciences Building, room 401A

Course Description

Biological Principles: A study of various biological factors which affect the health and survival of man in modern society. Designed for non-majors.

This class is designed for undergraduate students interested in learning basic biological concepts, including cellular biology, human systems, evolution, ecology, and conservation, with a focus on real-world applications in today's society.

Student Learning Outcomes

By the end of the semester, students who complete all assignments and coursework will be able to:

1. Knowledge Application: Define basic biological concepts.
2. Interpretation and Evaluation: Identify reputable sources for biological information.
3. Communication: Apply basic biological concepts to decisions on health and public affairs in today's society.
4. Problem Solving: Understand the scientific method and its applications in biology.

Course Credit Hours

3 credits

Course Prerequisites

None

Course Requirements

Internet Access: This is a web enhanced course and all class announcements, lectures, supplementary reading material/websites, quizzes, and assignments will be posted on UCF Webcourses. All assignments will be submitted electronically through UCF Webcourses.

Textbook (recommended): *Campbell Essential Biology with physiology* 5th Edition by Eric J. Simon, Jean L. Dickey, and Jane B. Reece (ISBN: 978-0-321-77260-2). E-books and rentals are available. See purchase and rental options at UCF bookstore (<http://ucf.bncollege.com>) or www.amazon.com.

Learning Catalytics subscription (required): Learning Catalytics will be used for in-class participation credit. Participation will begin on Monday, January 14, 2019

Grade Scale

- A 90% or more
- B 80%-89%
- C 70%-79%
- D 60%-69%
- F less than 60%

Grade Policies

For final letter grades in this course, grade percentages will be rounded to the nearest whole number (less than 0.5 will be rounded down, 0.5 and greater will be rounded up). All grades will be posted on UCF Webcourses. No grades will be given by e-mail. Questions about grades should be addressed during office hours or by appointment to maintain confidentiality. Anyone requiring grade forms signed during the semester must bring form to office hours. No grade forms will be signed before/after lecture or by e-mail. Final grades will be calculated by the instructor using the grading scale described in the syllabus. *****Please note, Webcourses often calculates grades incorrectly and the “final grade” and “current grade” values shown on Webcourses may be inaccurate.**

Your final grade will be based on the following assessments.

Assessment	Maximum Points
Exams (drop lowest grade)	300
Final Exam	100
Weekly Quizzes (drop lowest grade)	45
Critical Thinking Questions (drop lowest grade)	30
In-Class Participation (drop 2 missed dates)	25
Total Points for Semester	500

1. Exams

Four regular exams will be given during the semester. The lowest regular exam grade will be dropped at the end of the semester and final grade will be calculated with 3 highest exam grades.

2. Final Exam

The final exam will be on Monday, April 29, 2019 from 1:00 to 3:50 pm. The final exam will be cumulative and **cannot be dropped**. Final exams will not be given early.

3. Weekly Quizzes

All quizzes will be given through Webcourses (5 pts/quiz). You will have a total of 10 quizzes throughout the semester. The first quiz is a syllabus quiz and will be open on Webcourses during the first week of classes (January 7, 2019 to January 14, 2019). Nine additional quizzes will be given on a weekly basis during the semester and the lowest quiz score will be dropped at the end of the semester prior to final grade calculation. Quizzes will open on Friday mornings and are due by 11:59 pm on the following Monday. Opening and closing dates for each quiz are listed in the class schedule below. For each of the weekly quizzes, you will have two attempts and your highest grade out of the two attempts will be recorded. These quizzes are open book/notes and unlimited time. All quizzes must be completed during scheduled time and no make-up quizzes will be given.

4. Critical Thinking Questions

Critical Thinking Questions will be posted on Webcourses and submitted electronically through Webcourses. Instructions for each assignment will be posted at the beginning of each new unit and will be due the Monday before the exam for each corresponding unit. The lowest critical thinking grade will be dropped at the end of the semester (4 total assignments, 10 pts each; 30 pts towards final grade).

6. In-Class Participation

In-class participation points will be based on responses submitted by Learning Catalytics during the class period for each day with participation activities. Submitting a response in class will count for credit, regardless of accuracy of answer. Participation will be given at the discretion of the instructor and will not be announced in advance. In-class participation will include responses to active learning activities, group discussions, and quiz style questions related to “homework” questions posed at end of previous class for you to research on your own before the next class. Your 2 lowest participation grades will be dropped at the end of the semester and participation will be worth a total of 25 points toward your final grade. There will be no make-ups for missed class participation.

Extra Credit

Each student has the chance for 30 total bonus points throughout the semester.

1. Bonus Participation Points- **10 points possible**. Bonus participation points will be based on the total number of questions answered correctly in class for entire semester.

2. Education and Outreach- **20 total points** possible from the following options.

Option 1: Living Shoreline Restoration: All dates will be given in class and posted on Webcourses. Maps to off campus activities will be posted on Webcourses. You must be able to stay for entire scheduled time to receive credit. **On-campus dates to prepare materials will last 2 hrs and be worth 5 pts each. Off-campus dates to assist with shoreline restoration will last 3-4 hrs and be worth 10 pts each. Students must sign-in on class record sheet at events to receive extra credit. No exceptions!**

Option 2. Public Service Announcement Video Project: **10 points possible, due date: 11:59 pm; April 19, 2019**. Create an original video to serve as a public service announcement on an environmental problem or health risk found in the area where you live. Video must be between 2-3 minutes and can be an individual submission or group submission (group of 4 students max). Videos should be uploaded to an on-line video website and video link must be submitted electronically to the class Webcourses site. Videos must be original and plagiarism will result in 0 extra credit points.

**If you have a legitimate reason (as determined by the instructor) for not being able to complete any of the above extra credit assignments, alternate assignments can be arranged with the instructor on a case by case basis. Please contact by e-mail or during office hours to arrange an alternate assignment.

Exam Policies

All students will need to provide scantrons (raspberry from UCF Bookstore) for each exam and bring photo ID. Exams will not be accepted without photo ID. Late students may enter classroom after the exam has begun, however, no extra time will be given and exams must be turned in by the posted finish time. Calculators may be used on exams as needed, however, cell phones cannot be used as a calculator and calculators cannot be shared among students. Anyone observed talking, using a cell phone, or sharing calculators during an exam period will receive an automatic zero on the exam.

Make-Up Exams

For unexcused absences on exam days, there will be no make-up exams. A missed exam will count as your lowest exam score and dropped. For excused absences on mid-term exam days (i.e. official UCF school and sports-related events, court appearance, etc.), official documentation must be given to the instructor within one week of absence to schedule make-up exam. All excused make-up exams not completed by April 19, 2019 will be given during the final exam period. Illnesses will only be excused when accompanied by documentation of doctor's visit. No exams will be given early.

Make-Up Assignments for Authorized University Events or Co-curricular Activities

Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at <<http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf>>

Religious Observances

Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the UCF policy at <<http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf>>.

Deployed Active Duty Military Students

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements

Late Policy

Assignments are due to UCF Webcourses by 11:59 pm on due dates posted in class schedule. Assignments turned in late will be penalized using the following scale: midnight to 24 hrs past deadline: -25% of points, 24-48 hrs past deadline: -50% of points, 48-72 hrs past deadline: -75% of points, after 72 hrs past deadline: no credit given. It is the student's responsibility to make sure assignments are uploaded correctly and submitted to UCF Webcourses by the due date. I strongly recommend double-checking your submission to be sure it was uploaded correctly and is visible on UCF Webcourses before the due date.

Incomplete Grades

The current university policy concerning incomplete grades will be followed in this course. Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course and the remaining work can be completed the next semester. The instructor is the final authority on whether you qualify for an incomplete. Incomplete work must be finished by the end of the subsequent semester or the "I" will automatically be recorded as an "F" on your transcript.

Classroom Policies

E-mails to instructor must be made from your official UCF address (name@knights.ucf.edu) and will not receive a reply if sent from other e-mail addresses. All e-mails from instructor will also be sent to your UCF address, so please check regularly throughout the semester. I will respond to e-mails as soon as possible, however, please expect at least 24 hrs for a response. Emails will not be responded too during holidays or weekends.

Attendance of class regularly is necessary for successful completion of this course. Lectures will be posted on-line, however, additional material covered in class such as examples, practice problems and current event topics will be included on exams and may not be included in on-line lectures.

Please arrive on time for all class meetings and refrain from disturbing the class, including talking, arriving late or using electronic devices. Per university policy and classroom etiquette; phones and other electronic devices **must be silenced** during all class lectures and exams. Those not heeding this rule will be asked to leave the classroom immediately so as to not disrupt the learning environment.

Academic dishonesty in any form will not be tolerated. If you are uncertain as to what constitutes academic dishonesty, please consult The Golden Rule, the University of Central Florida's Student Handbook (<http://www.goldenrule.sdes.ucf.edu>) for further details. As in all

University courses, The Golden Rule Rules of Conduct will be applied. Violations of these rules will result in a record of the infraction being placed in your file and receiving a zero on the work in question AT A MINIMUM. A “Z Designation”, meaning the letter Z will precede student’s final grade for this course, will be placed on student’s official UCF transcripts to indicate academic dishonesty (for more information on Z designation see <http://z.ucf.edu>). At the instructor’s discretion, you may also receive a failing grade for the course and confirmation of such incidents can also result in expulsion from the University.

Disability Access

The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations. Students who need accommodations must be registered with Student Disability Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Campus Safety Statement

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide’s physical location and review the online version at http://emergency.ucf.edu/emergency_guide.html.
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see <http://www.ehs.ucf.edu/AEDlocations-UCF> (click on link from menu on left).
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <https://my.ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.

- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (<<https://youtu.be/NIKYajEx4pk>>).

Class Schedule: Class time will include a mix of lecture and active learning assignments

*Schedule subject to change and all changes will be given in class and posted on-line. All assignments are due by 11:59 pm on the dates listed below.

Unit Topic	Date	Lecture	Book Chapters	Assignments
Unit 1: Introduction to Biology and Cells	1/7/2019	Syllabus, Introduction to Biology	1	Syllabus Quiz Opens
	1/9/2019	Biodiversity	1	
	1/11/2019	Good Science vs. Bad Science	1	
	1/14/2019	Scientific Method	1	Syllabus Quiz Due
	1/16/2019	Chemistry of Life	2	
	1/18/2019	Molecules of Life	3	Quiz 1 opens
	1/21/2019	No Lecture (MLK Holiday)		Quiz 1 due
	1/23/2019	A Tour of the Cell	4,5	
	1/25/2019	Cellular Energy	6,7	Quiz 2 opens
	1/28/2019	Unit 1 Wrap-Up		Quiz 2 due, Critical Thinking Question 1 Due
Unit 2: Genetics and Evolution	1/30/2019	Exam 1	1-7	
	2/1/2019	Structure and Function of DNA	10	
	2/4/2019	Cellular Reproduction	8	
	2/6/2019	Cellular Reproduction	8	
	2/8/2019	Patterns of Inheritance	9	Quiz 3 opens
	2/11/2019	Patterns of Inheritance	9	Quiz 3 due
	2/13/2019	Microevolution	13	
	2/15/2019	Macroevolution	14	Quiz 4 opens
	2/18/2019	Unit 2 Wrap-Up		Quiz 4 due, Critical Thinking Question 2 Due
	2/20/2019	Exam 2	8-10,13-14	

Unit 3: Structure and Function of Organisms	2/22/2019	Microbes		
	2/25/2019	Plants: Structure and Function	28-29	
	2/27/2019	Animals: Structure and Function	21	
	3/1/2019	Circulation and Respiration	23	Quiz 5 opens
	3/4/2019	Digestion and Water Balance	22	Quiz 5 due
	3/6/2019	Diet & Exercise	22, 27	
	3/8/2019	Lecture Cancelled		Quiz 6 opens
	3/11/2019	Spring Break		
	3/13/2019	Spring Break		
	3/15/2019	Spring Break		
	3/18/2019	Nervous System	27	Quiz 6 due, Critical Thinking Question 3 Due
	3/20/2019	Unit 3 Wrap-Up		*Withdraw Deadline*
	3/22/2019	Exam 3	21-23, 26-29	
	Unit 4: Ecology	3/25/2019	Population Ecology	19
3/27/2019		Communities	20	
3/29/2019		Communities	20	Quiz 7 opens
4/1/2019		Ecosystems	20	Quiz 7 due
4/3/2019		Ecosystems	20	
4/5/2019		Biosphere	18	Quiz 8 opens
4/8/2019		Unit 4 Wrap-Up		Quiz 8 due, Critical Thinking Question 4 Due
4/10/2019		Exam 4	18-20	
Unit 5: Applied Biology	4/12/2019	DNA Technology	12	
	4/15/2019	Disease Ecology		
	4/17/2019	Threats to Biodiversity		
	4/19/2019	Conservation Biology	20	Quiz 9 opens, Extra Credit Video Due

	4/22/2019	Last Day of Classes- Semester Wrap-Up		Quiz 9 due
	4/29/2019	Final Exam (1:00-3:50 pm)	Cumulative	

