



**BSC 1005: Biological Principles**  
**Spring 2018 Syllabus**  
**College of Science, Dept. of Biology**

**Instructor:** Dr. Melinda Donnelly

**Lecture Location:** Classroom Building 2, room 101

**Lecture Days and Time:** MWF 10:30 am-11:20 am

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**Instructor Contact Information**

E-mail: [Melinda.Donnelly@ucf.edu](mailto:Melinda.Donnelly@ucf.edu)

Office Hours: M: 9:00 am to 10:00 am and 2:30-3:30 pm, F: 9:00 am to 10:00 am

\*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.

**Course Goals**

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

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

1. Define basic biological concepts.
2. Identify reputable sources for biological information.
3. Apply basic biological concepts to decisions on health and public affairs in today's society.
4. 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](http://www.amazon.com).

iClicker2 remote (required): iClicker2 will be used for in-class participation credit. Participation will begin on Wednesday, January 17, 2018 and you must register your iclicker through the class Webcourses page. Available at UCF bookstore (<http://ucf.bncollege.com>).

## 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
<b>Total Points for Semester</b>	<b>500</b>

### 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 30, 2018 from 10 am to 12:50 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 8, 2018 to January 17, 2018). 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 iclicker remote during the class period for each day with participation activities. Participation will be given at the discretion of the instructor and will not be announced in advance. 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.

### **How to register your iclicker2:**

1. The only valid way to register your iClicker2 for this class is through Webcourses. Even if you registered your iClicker2 in a previous semester you must reregister it this semester.
2. Log into the class web page
3. On the left-hand side menu click the tab named "iclicker".
4. Click on the "i>clicker Registration" link.
5. Follow the instructions provided.

### **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 with the iclicker 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 20, 2018**. 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 20, 2018 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.

### **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.

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.

## Class Schedule

\*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	1/8/2018	Syllabus, Introduction to Biology	1	Syllabus Quiz Opens
	1/10/2018	Good Science vs. Bad Science	1	
	1/12/2018	Biodiversity		
	1/15/2018	No Lecture (MLK Holiday)		
	1/17/2018	Chemistry of Life	2	Syllabus Quiz Due
	1/19/2018	Molecules of Life	3	Quiz 1 opens
	1/22/2018	A Tour of the Cell	4,5	Quiz 1 due
	1/24/2018	A Tour of the Cell	4,5	
	1/26/2018	Cellular Energy	6,7	Quiz 2 opens
1/29/2018	Unit 1 Wrap-Up		Quiz 2 due, Critical Thinking Question 1 Due	
Unit 2: Genetics and Evolution	1/31/2018	Exam 1	1-7	
	2/2/2018	Structure and Function of DNA	10	
	2/5/2018	No Lecture		
	2/7/2018	Cellular Reproduction	8	
	2/9/2018	Patterns of Inheritance	9	Quiz 3 opens
	2/12/2018	Patterns of Inheritance	9	Quiz 3 due
	2/14/2018	Microevolution	13	
	2/16/2018	Macroevolution	14	Quiz 4 opens

	2/19/2018	Unit 2 Wrap-Up		Quiz 4 due, Critical Thinking Question 2 Due
	2/21/2018	Exam 2	8-10,13-14	
Unit 3: Structure and Function of Organisms	2/23/2018	Microbes		
	2/26/2018	Plants: Structure and Function	28-29	
	2/28/2018	Animals: Structure and Function	21	
	3/2/2018	Circulation and Respiration	23	Quiz 5 opens
	3/5/2018	Digestion and Water Balance	22	Quiz 5 due
	3/7/2018	Diet & Exercise	22, 27	
	3/9/2018	Nervous System	27	Quiz 6 opens
	3/12/2018	Spring Break		
	3/14/2018	Spring Break		
	3/16/2018	Spring Break		
	3/19/2018	Unit 3 Wrap-Up		Quiz 6 due, Critical Thinking Question 3 Due
	3/21/2018	Exam 3	21-23, 26-29	
Unit 4: Ecology	3/23/2018	Population Ecology	19	
	3/26/2018	Population Ecology	19	
	3/28/2018	Communities	20	
	3/30/2018	Communities	20	Quiz 7 opens
	4/2/2018	Ecosystems	20	Quiz 7 due
	4/4/2018	Ecosystems	20	
	4/6/2018	Biosphere	18	Quiz 8 opens
	4/9/2018	Unit 4 Wrap-Up		Quiz 8 due, Critical Thinking Question 4 Due
4/11/2018	Exam 4	18-20		
Unit 5: Applied Biology	4/13/2018	DNA Technology	12	
	4/16/2018	Disease Ecology		
	4/18/2018	Threats to Biodiversity		
	4/20/2018	Conservation Biology	20	Quiz 9 opens, Extra Credit Video Due
	4/23/2018	Last Day of Classes- Semester Wrap-Up		Quiz 9 due
	4/30/2018	Final Exam (10:00 am - 12:50 pm)	Cumulative	