BSC 1005: Biological Principles Spring 2014 Syllabus College of Science, Dept. of Biology



Instructor: Melinda Donnelly Lecture Location: VAB 132 MWF 10:30 am – 11:20 am

Instructor Contact Information

E-mail: mdonnelly@knights.ucf.edu

Office Hours: Monday: 12:30 pm – 2:30 pm, Wednesday: 9 am - 10 am and 2 pm - 4 pm; or by

appointment

Office Location: Biological Sciences Building, Room 102 C

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 necessary assignments 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.

iClicker (version 1 or 2): Available at UCF bookstore. In-class participation for a grade will begin on Monday, January 13, 2014 and all students need to own or rent an iclicker and have it registered by this date.

Textbook (recommended): *Campbell Essential Biology with physiology* 4th 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.

Registering your iClicker

Visit the following website to register your iclicker: http://www.iclicker.com/support/registeryourclicker/

Important Registration Information:

- 1. When entering your First and Last Names, please use your official names according to UCF. No nicknames or aliases.
- 2. When asking for your Student ID, please use your official UCF NID (Network ID), that is typically the first two letters of your first name followed by six (occasionally five) numbers.
- 3. Your alphanumeric i>Clicker remote ID is found on a bar code sticker on the bottom of the back of your i>Clicker remote. It typically consists of eight numbers and letters.

If you are having difficulty registering or using your iClicker, contact a Technical Support Agent by calling 1-866-209-5658.

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 using the grading scale described in the syllabus and posted on UCF Webcourses after final exams.

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.

<u>Assessment</u>	Maximum Points
1. Mid-Terms (2 of 3, lowest	
exam grade dropped)	200
2. Final Exam	100
3. Assignments	40
4. Pre-Test	5
5. Syllabus Quiz	5
6. Participation (lowest 2 grades	
dropped)	55
7. Quizzes (lowest quiz grade	
dropped)	45
Total Points for Semester	450 points

1. Mid-Term Exams

Three mid-term exams will be given during the semester. The lowest mid-term exam grade will be dropped at the end of the semester and final grade will be calculated with 2 highest mid-term exam grades.

2. Final Exam

The final exam will be on Monday, April 28, 2014 from 10:00 am to 12:50 pm. The final exam will be cumulative and cannot be dropped. Final exams will not be given early.

3. Assignments

There will be two assignments worth a total of 40 points towards your final grade. Detailed instructions of each assignment will be given in class and posted on UCF Webcourses. All assignments must be turned in electronically (file types accepted-.pdf, .doc, .docx) to UCF Webcourses and must be submitted by midnight on due date for full credit.

- 1. Assignment 1: Information Fluency Assignment (15 points) Due by February 10, 2014
- 2. Assignment 2: Review a Journal Article (25 points) Due by March 17, 2014

4. Pre-Test

The pre-test will be open on Webcourses during the first week of classes (January 6, 2014 to January 13, 2014). Completion of the pre-test during the designated time is required and will count as 5 points towards final grade (incorrect answers will not decrease grade, so don't worry if you are unsure of the answer!).

5. Syllabus Quiz

A syllabus quiz will be open on Webcourses during the first week of classes (January 6, 2014 to January 13, 2014). Completion of the syllabus quiz is required (5 pts) and you have unlimited time per attempt and unlimited number of attempts.

6. Participation

Class participation points will be based on presence or absence of iclicker responses for each day with participation activities (calculated weekly, 5pts/week). Participation will be given at the discretion of the instructor and will not be announced in advance. Students are encouraged to bring the iclicker remote to class each day and to check batteries often. Only students responding with their registered remote will receive credit. Your 2 lowest weekly participation grades will be dropped at the end of the semester and participation will be worth a total of 55 points toward your final grade. There will be no make-ups for missed class participation.

7. On-Line Quizzes

All quizzes will be given through Webcourses (5 pts/quiz). Ten on-line 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 Mondays and close at midnight on Fridays and will cover the previous week's material. Due 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.

Extra Credit

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

- 1. On-Line Activities- 10 points possible, instructions and due dates will be posted on Webcourses. On-line activities must be submitted prior to posted due date to receive bonus points. No late submissions are accepted.
- 2. Volunteer Extra Credit- 10 points given for attending one of the following volunteer activities. Students must sign-in on class record sheet at events to receive extra credit. No exceptions!
- -Saturday, January 18, 2014: Mangrove and saltmarsh grass planting, oyster mat making. Location: UCF campus, Biology Field Research Center (Bldg. # 92, UCF campus map), 12 pm – 2 pm.
- -Saturday, March 15, 2014: Mangrove and saltmarsh grass planting. Location: UCF campus, Biology Field Research Center (Bldg. # 92, UCF campus map), 9 am-11 am
- 3. You-Tube Video or Factsheet about your biodiversity topic- 10 points possible. Create a 2-minute You-tube video or a factsheet (1 printed page, front and back) about your biodiversity topic you choose for your assignments. Due Date: April 14, 2014

Videos and factsheets must be original and plagiarism will result in 0 extra credit points. The video can be an individual submission or group submission (group of 4 students max). Videos should be uploaded to you-tube and video link must be submitted electronically to the class Webcourses site. Factsheets will be submitted electronically to Webcourses.

**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. Students will be required to wait 20 minutes before turning in completed exams. Late students may enter classroom during the first 20 minutes, however, no extra time will be given and exams must be turned in by the posted finish time. After exam collection has begun, no late students will be permitted to take the exam and this will count as your lowest exam grade to be dropped at the end of the

semester. 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 mid-term exam days, there will be no make-up exams. A missed mid-term 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 and make-up exams will be given during office hours or during the final exam period. All excused make-up exams not completed by April 14, 2014 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 midnight 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; mobile phones, iPods, etc. 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 and quizzes are due by 11:59 pm.

Date	Lecture	Book Chapters	Assignments and Quizzes
1/6/2014	Syllabus, Introduction to Biology	1	Syllabus Quiz and Pre-Test Open
1/8/2014	Biodiversity	1	
1/10/2014	Life's Hierarchy of Organization		
1/13/2014	Good Science vs. Bad Science	1	Syllabus Quiz and Pre-Test Due, Quiz 1 opens
1/15/2014	Chemistry of Life: Water	2	
1/17/2014	Chemistry of Life: Greenhouse Gases		Quiz 1 Due
1/20/2014	No School		Quiz 2 Opens
1/22/2014	Organic Molecules: DNA	3,10	
1/24/2014	Organic Molecules: Proteins	3	Quiz 2 Due
1/27/2014	Organic Molecules: Carbohydrates and Fats	3	Quiz 3 Opens
1/29/2014	Introduction to Cells	4,5	
1/31/2014	Cellular Energy	6,7	Quiz 3 Due
2/3/2014	Mid-Term Exam 1	1-7, 10	
2/5/2014	Cellular Reproduction: Mitosis and Meiosis	8	
2/7/2014	Genetics and Patterns of Inheritance	9	
2/10/2014	The Life of a Flowering Plant	28	Quiz 4 Opens, Assignment 1 Due
2/12/2014	The Working Plant	29	
2/14/2014	Animal Structure and Function	21	Quiz 4 Due
2/17/2014	Nervous System	27	Quiz 5 opens
2/19/2014	Circulation and Respiration	23	
2/21/2014	Digestion and Water Balance	22	Quiz 5 Due
2/24/2014	Movement	27	
2/26/2014	Mid-Term Exam 2	8,9,21-23,27-29	
2/28/2014	Old Wives Tales		

3/3/2014	Spring Break		
3/5/2014	Spring Break		
3/7/2014	Spring Break		
3/10/2014	Introduction to Ecology	18	Quiz 6 Opens
3/12/2014	Populations	19	
3/14/2014	How Populations Evolve	13	Quiz 6 Due
3/17/2014	How Populations Evolve	13	Quiz 7 Opens, Assignment 2 Due
3/19/2014	How Biological Diversity Evolves	14	
3/21/2014	The Evolution of Animals	17	Quiz 7 Due
3/24/2014	Communities	20	Quiz 8 Opens
3/26/2014	Communities	20	
3/28/2014	Ecosystems	20	Quiz 8 Due
3/31/2014	Mid-Term Exam 3	13,14,17-20	
4/2/2014	Biosphere	18	
4/4/2014	Biosphere	18	
4/7/2014	Threats to Biodiversity		Quiz 9 Opens
4/9/2014	Threats to Biodiversity		
4/11/2014	Climate Change		Quiz 9 Due
4/14/2014	Conservation Biology		Quiz 10 Opens, Extra Credit: You-Tube Video and Factsheets Due
4/16/2014	Restoration Biology		
4/18/2014	Sustainability		Quiz 10 Due
4/21/2014	Final Exam Review		
4/28/2013	Final Exam (10:00 am - 12:50 pm)	Cumulative	