# **Biology I Lecture Syllabus: Fall 2015**

# **LECTURE TIMES/LOCATION:**

MWF 3:30 – 4:20 pm Location: BA1 119

#### **PROFESSOR:**

Dr. Tiffany Doan

Office: Biology 401A, phone: 407-823-5424, email: Tiffany.Doan@ucf.edu

Office Hours: Tu 2:30-4:00 pm, W 12:00-1:00 pm, Th 2:30-4:00 pm, or by appointment

#### **BIOLOGY I COURSE/LAB COORDINATOR:**

Michele Yeargain

Biology 201B

Michele.Yeargain@ucf.edu

#### WHO TO CONTACT:

**Professor:** If your question is about course content from lecture. If you would like to schedule a meeting with Dr. Doan, please feel free to **e-mail** her or visit during her office hours. She will be glad to help. She will try to answer all e-mails within 24-48 hours, except on weekends, and please know that her schedule is busy, so she may not be able to meet easily outside of office hours. Please avoid leaving phone messages as this is not an efficient or rapid means of communication.

**Biology II Lab Coordinator:** If your question is about procedures (e.g., grading, your grade, exam times, online resources, text book availability etc.), please **e-mail** Ms. Yeargain. She will be glad to help. She also tries to answer all e-mails within 24-48 hours; though she is also quite busy.

**Graduate Teaching Assistant:** If your question is about your lab, including grading, please **e-mail** your GTA or see him/her during their office hours. They will be glad to help.

**COURSE DESCRIPTION:** BSC 2010 (*Biology I*) is the first of a two semester General Biology sequence for biology majors, students entering health professions, and others who require a lab-based introductory biology course. This course provides a cornerstone and prerequisite for all upper level classes in biology. An integrated laboratory experience will develop your ability to think critically and to document, analyze and apply data effectively.

- Course Objectives:
  - Introduction to biological terminology
  - Introduction to the scientific process
  - o Application of scientific concepts to a laboratory exercise
  - Mastery of a broad range of topics of introductory biology necessary as a foundation for a more detailed study in advanced biology classes or a pre-health career
- General Course Topics:
  - Basic biological chemistry
  - o Cell structure, function, reproduction, and other processes
  - o Metabolism, including cellular respiration and photosynthesis
  - o Mendelian genetics and chromosomal inheritance
  - DNA and protein synthesis
  - Control of gene expression
  - Introductory evolutionary theory

#### **RESOURCES:**

- **Required Text** Campbell Biology, 10th Edition with Mastering Biology Access and Second Life Access. Pearson/Cummings Publishing Company, Inc.
- **Required Device** iClicker (any physical version is acceptable)
- **Webcourses@UCF** Bio-I is a web-enhanced class. Lecture notes, PowerPoints, announcements, lab assignments, and discussion boards for peer feedback (not monitored by Dr. Doan, Ms. Yeargain, or GTAs) may be found on Webcourses@UCF. Use your NID and myUCF password to log in to Webcourses@UCF.

#### **POLICIES:**

**E-mail**: All routine communications must be by <u>E-mail</u>. Please follow the following protocol:

- 1. Write a detailed description in the subject line of the e-mail (e.g. Question about Lecture 2, slide 5).
- 2. Begin and end the email appropriately (e.g. Dear Dr. Doan; Yours sincerely A. Student).
- 3. Write your <u>full</u> name (as it appears in the class register), PID, and lab section at the end of the email.
- 4. Your e-mail may be forwarded between Dr. Doan, Ms. Yeargain, and GTAs. For continuance it is IMPERATIVE that you include your full name, and a relevant subject descriptor in the subject line. Failure to follow this protocol will delay a reply or may lead to no reply.
- 5. In accordance with FERPA (Family Education Rights and Privacy Act), no grades will be given by phone or e-mail.

**Redundant e-mails:** We will not reply to messages requesting information that is available on this syllabus, or that pertain to announcements posted on Webcourses@UCF (or made during class), or that can be resolved by common sense and/or using standard public or UCF information services. Make sure you read Webcourses@UCF postings before you send an invalid e-mail. If you do not receive a reply to an e-mail, check it was not redundant before re-sending.

**Telephone:** We encourage you to use email for routine communications – please reserve phone calls for emergency situations.

**Attendance:** Each day questions will be posed through the iClicker system, for which credit will be given. If class is missed, there will be no way to make up the questions and your grade will be negatively affected. You will be given two "free" days in case of illness. Do not miss lectures unless absolutely necessary.

**Online quizzes:** Pre-reading quizzes will be taken through Webcourses that count for a total of 5% of your grade. These quizzes are intended to help you learn along the way. You will be expected to read each chapter and take a short quiz to assess your knowledge of the chapter *prior to* going over those chapters during lecture. This will ensure you will be ready to cover the material during lecture and anything you didn't understand in the reading can be covered in detail during class. You may take each quiz twice and the highest of the two scores will be your grade for that quiz. The lowest quiz will be dropped. All quizzes are due by **3:00 pm** on their due dates. Quizzes will available for several days before the due date, but if you miss the due date it is not possible to retake the quiz. It is thus recommended not to wait until the last day to first attempt the quiz. **Note:** The first two quizzes will be different from the others—they will assess your comprehension of the online syllabus and PowerPoint presentations for the first two chapters (specific details will be provided).

#### **Lecture Exam Policies:**

- 1. All exams will be based on both lecture material and text reading assignments.
- 2. You must bring:
  - a) a pencil
  - b) your UCF ID **note**: failure to show your ID may result in a score of zero for the exam.
- 3. Scantron Policy: You are required to supply scantrons for your exams. Five (5) scantrons with **no markings** on them MUST be given to your laboratory teaching assistant by 3 September 2015. If no scantrons are submitted, you will receive a zero (0) on Exam 1.
- **4.** Exams 1-4 will begin promptly at the beginning of class and will cover material from that unit only. The final exam will occur during the final exam period at 1:00-3:30 pm on Friday, 11 December and will be a **comprehensive** 2 ½ hour multiple choice final exam that will include all chapters covered during the semester. **Aim to arrive 10 minutes early for exams.** Once you have received the question paper you must take the exam.
- 5. *Do not arrive late.* A late student will be allowed access to the exam only at the discretion of the instructor/proctors. Under no circumstances will extra time be allowed.
- 6. All books, notes, and bags must be placed in the front of the room before exams are handed out. **There will be no exceptions to this policy.** Do not bring anything valuable with you to an exam: you are responsible for your own personal belongings. Electronic devices, including calculators are prohibited. Remove baseball caps or turn them backward while taking exams. Go to the restroom before the exam.
- 7. You must print your **name**, **PID number**, **and <u>laboratory section</u> on the scantron AND question sheet**, and both will be checked as you leave the exam. Failure to fill in correct identifying information may result in a zero for that exam.
- 8. Scantron sheets will not be returned to students. Each student will receive *(during lab)* an individual test report sheet with all correct and incorrect responses marked on it.
- 9. Exams may be reviewed with Ms. Michele Yeargain. <u>Each exam must be reviewed prior to the next exam date (i.e., if you would like to review exam 1 this must be done before exam 2 is given).</u>

## **Missed Exam Policy:**

- 1. Make-up exams for exams 1, 2, 3, and 4 will be provided *only* for students who must miss the exam due to official University business at which your presence was required (e.g. a university-sponsored team event). *Hard-copy documentation must be provided 48 hours in advance from the appropriate university body*.
- 2. For all other cases (e.g., unforeseen emergencies) you must contact the professor as soon as reasonably possible and provide *hard-copy documentation* (a signed document from a doctor, police officer, judge etc. not by e-mail). The absence must have been caused by a valid emergency as defined by UCF and/or the professor, including but not limited to: major illness, serious family emergency, jury duty, military obligation, etc.
- **3.** All students are required to take the final exam, and there will be **no make-up exams for the Final.**

**i>Clicker:** We will be using the i>clicker student response system. i>clicker helps your instructor to understand what you know and gives everyone a chance to participate in class. We will use i>clicker to keep track of participation in the class. Each day your instructor will ask questions using the i>clicker system and you will get partial credit for participation and full credit for participation and correct answers for up to 10 points per day. If you do not participate you will receive a grade of zero for the day. Participation with i>clicker will account for 5% of your final grade. Two of the scores will be dropped to

account for times you are sick or forget to bring your clicker to class. No other dates will be dropped, unless you have a university-allowed absence.

You may use one of the following models:

The original i>clicker

i>clicker +

i>clicker 2

(The mobile application, i>clicker GO, will NOT be allowed)

### How to register your i>Clicker:

To receive credit for the responses you submit with i>clicker, you must register as soon as possible (you will lose points in the course beginning Wednesday, 2 September), with a final deadline of Friday, 4 September. Students who register after this time will not receive credit. **You must register your clicker within our BIO I Webcourses.** Registration through another course or through iclicker.com will not match your responses with your name and you will not receive credit. Click on the iClicker tab on the left bar of our Webcourse and follow the simple instructions to register. Bringing a fellow Biology I student's i>clicker to class is considered to be cheating and a violation of the UFC Creed. If you are caught with a remote other than your own or have votes in a class that you did not attend, you will forfeit all clicker points and may face additional disciplinary action.

**Grading:** You will receive one grade for BSC 2010 that combines your lecture and laboratory point totals. Exam scores will be posted on Webcourses as a courtesy, but should not be considered the official grades. No grades will be given over the phone or by email according to Federal law (FERPA regulations). Each semester exam will cover 4-5 chapters. Of the four semester exams that will be administered, the lowest will be dropped. The cumulative final exam will cover all chapters and may not be dropped. The grading scale will be:  $\mathbf{A} = 90\text{-}100$ ;  $\mathbf{B} = 80\text{-}89$ ;  $\mathbf{C} = 70\text{-}79$ ;  $\mathbf{D} = 60\text{-}69$ ;  $\mathbf{F} = \leq 59$ .

Your grade will be calculated as follows:

	<u>Weight</u>
Semester Exams (- 1 dropped)	15% each
iClicker	5%
Online Quizzes	5%
Laboratory	25%
Final Exam	20%
	100%

**Grade Policy:** The overall semester grade will be rounded to the nearest whole number (e.g. 89.5% will be rounded to 90% and 89.4% will be rounded to 89%). No other grade adjustments will be made. For Biology majors, a grade of "C" is required to advance in Biology coursework. For other majors, please check your major's department for more information.

**Course Withdrawal:** The withdrawal date for the fall semester is **Monday, 2 November 2015, at 11:59 pm.** Students wishing to withdraw must initiate the process themselves. The instructor does not process withdrawals. However, feel free to discuss a potential withdrawal with Ms. Yeargain or Dr. Doan.

**Classroom Conduct:** By enrolling at UCF, all students have agreed to abide by the Golden Rule. Please become familiar with this document at: <a href="http://www.goldenrule.sdes.ucf.edu">http://www.goldenrule.sdes.ucf.edu</a>. All students are expected to act maturely in the classroom and show consideration for their peers and the instructor. Please use

common courtesy in class by arriving and departing on time, by not talking during class, and by not going in and out of class. *Turn off cell phones and other electronic devices.* Students who fail to abide by the above conduct will be invited to leave the class. Any student who consistently distracts other students or the instructor will be removed from the course. Students are responsible for announcements or assignments given during class and/or posted on WebCourses.

Cheating on exams or other assignments will not be tolerated. Any person caught copying another paper, signing in for someone else, using another student's iClicker, attempting to steal part or all of an exam, plagiarizing, or cheating in any other way will receive zero points for the course and the matter will immediately be referred to the UCF Office of Student Conduct for disciplinary action.

**Student Access Statement:** 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 instructor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the instructor to request accommodations. Students who need accommodations must be registered with Student Accessibility Services, Ferrell Commons Room 185, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the instructor.

**Academic Help:** Tutoring and supplemental instruction (SI) sessions are available through the Student Academic Resource Center (SARC) in Room 113 Howard Phillips Hall. Visit the SARC website at <a href="https://www.sarc.sdes.ucf.edu">www.sarc.sdes.ucf.edu</a>. Ask for help if you need it and don't wait until it's too late!

**Other Help:** UCF has many offices and programs to help students will all kinds of issues. It can be confusing and overwhelming to know where to turn sometimes. Please go to **www.ucfcares.com** or call 407-823-5607 for immediate help with coping with tragedy, crisis, crime, poverty, family life, discrimination, alcohol abuse, or ANY other issue that is affecting your health or well being.

**Final Note:** The professor reserves the right to change the syllabus and management of the class at any time during the semester. These changes will be announced in lecture.

# **Biology I Schedule for Fall 2015**

Week	Date	Day	Lecture	Chapters	Quiz	Laboratory
1	24-Aug	М	Course Introduction			NO LABS
	26-Aug	W	Science and Biology (online)	1		
	28-Aug	F	Virtual Laboratory Information		Q1, Syllabus/Ch 1	
2	31-Aug	М	Chemical Context of Life (online)	2		
	2-Sep	W	Review / Water and Life	3	Q2, Ch 2	UCF Virtual Lab Orientation
	4-Sep	F	Water and Life / Carbon and Diversity of Life	3/4		
3	7-Sep	М	NO CLASS – Labor Day			Holiday Week—NO LABS
	9-Sep	W	Carbon and Diversity of Life	4		
	11-Sep	F	Large Biological Molecules	5	Q3, Ch 4/5	
	14-Sep	М	Large Biological Molecules	5		
4	16-Sep	W	Large Biological Molecules	5		Measurements
	18-Sep	F	Exam I	1-5		
	21-Sep	М	Membrane Structure and Function	7	Q4, Ch 7	Osmosis/Diffusion
5	23-Sep	W	Virtual Laboratory Information			
	25-Sep	F	Membrane Structure and Function / Tour of the Cell	7/6		
	28-Sep	М	Tour of the Cell	6		Enzymes
6	30-Sep	W	Metabolism	8	Q5, Ch 6/8	
	2-Oct	F	Metabolism / Cellular Respiration	8/9		
	5-Oct	М	Cellular Respiration	9		
7	7-Oct	W	Photosynthesis	10	Q6, Ch 9/10	Cellular Respiration
	9-Oct	F	Photosynthesis	10		
	12-Oct	М	Exam II	6-10		Microscope
8	14-Oct	W	Cell Cycle	12		
	16-Oct	F	Cell Cycle / Meiosis and the Sexual Cycle	12 / 13	Q7, Ch 12/13	
	19-Oct	М	Meiosis and the Sexual Cycle	13		Mitosis/Meiosis
9	21-Oct	W	Mendel and the Gene Idea	14		
	23-Oct	F	Mendel and the Gene Idea	14		
	26-Oct	М	Chromosomal Basis of Inheritance	15	Q8, Ch 14/15	Genetics I
10	28-Oct	W	Chromosomal Basis of Inheritance	15		
	30-Oct	F	Exam III	12-15		

Week	Date	Day	Lecture	Chapters	Quiz	Laboratory
11	2-Nov	М	Molecular Basic of Inheritance	16	Q9, Ch 16	
	4-Nov	W	Molecular Basic of Inheritance	16		Genetics II
	6-Nov	F	Gene Expression	17		
12	9-Nov	М	Gene Expression	17		
	11-Nov	W	NO CLASS – Veteran's Day			Holiday Week—NO LABS
	13-Nov	F	Regulation of Gene Expression	18	Q10, Ch 17/18	
	16-Nov	М	DNA Tools and Biotechnology	20		
13	18-Nov	W	DNA Tools and Biotechnology	20		DNA Synthesis, Transcription,
	20-Nov	F	Exam IV	16-18, 20		and Translation
	23-Nov	М	Descent with Modification	22	Q11, Ch 22	
14	25-Nov	W	NO CLASS			Holiday Week—NO LABS
	27-Nov	F	NO CLASS – Thanksgiving			1
15	30-Nov	М	Descent with Modification	22		
	2-Dec	W	Evolution of Populations	23	Q12, Ch23	Hardy-Weinberg
	4-Dec	F	Evolution of Populations	23		
	7-Dec	М	Review for Final Exam			
	11-Dec	F	Final Exam (1:00-3:30 pm)			