

SYLLABUS
BIOLOGY 1107: Principles of Biology I
Fall Semester 2016

Section 001: (9:05-9:55AM, Mon, Wed and Fri)
Bldg.: Laurel Hall, Room 102

Section 020: (10:10-11:00AM, Mon, Wed and Fri)
Bldg.: Laurel Hall, Room 102

Instructor: Dr. Thomas D. Abbott

Office: Torrey Life Sciences, Rm. 212

Phone: (860) 486-2939

E-mail: thomas.abbott@uconn.edu

Office Hours: by appointment

Materials you will need for this course; these are available **at the UConn Book Store:**

- **Biological Science Custom 6th Ed.**, by Scott Freeman (2014) Benjamin Cummings. Try to read assignments before each lecture.
- **Laboratory Manual:** Biology 1107 Laboratory Manual, **Fall 2016/Spring 2017 ed.**
- **Safety splash goggles:** (3M® brand, available in the “Supplies” section of UConn Coop)
- **Lab coat:** A lab coat is necessary and should you choose, can be purchased at the UConn Coop. (Tyvek® brand is acceptable) At a minimum, regardless of type or brand, all lab coats must extend below the waist.

Computer and Internet Access:

Access to the World Wide Web is required. Computers are available at the Computer Center, Residential Life, University Library, and other locations on campus.

Course information will be posted **on your HuskyCT website, which is accessible with your net ID.** You will have TWO HuskyCT websites for Bio 1107 – one specifically for **Lab Grades**, listed on the HuskyCT page for your lab section and the other, your HuskyCT lecture page, for **Course materials, including lab materials.** HuskyCT is accessed at <http://huskyct.uconn.edu> and help is available at <http://lrc.uconn.edu/> or by calling 486-1187.

Exams and Grades:

Exam dates: There will be five exams, each covering 1/5 of the course material. Exams will be held at the Testing Center unless otherwise noted. Check the **HuskyCT lecture site** for announcements. Exam grades will be posted to your HuskyCT lecture section page.

Exam I: Monday September 19th, 2016, (Testing Center)

Exam II: Friday October 7th, 2016, (Testing Center)

Exam III: Monday October 24th, 2016, (Testing Center)

Exam IV: Tuesday November 15th, 2016, (Testing Center)

Exam V: During Final Exam Week, taken in class/lecture hall as hard copy.

Exam format, content and point value: **Exam format, content and point value:** All five exams will consist of 50 questions in multiple-choice format. **Students must bring TWO #2 pencils to each exam and a photo ID.** *Exams will be primarily based on lecture material, but will also include material from assigned text readings and the study guides. **Please take note:** the fifth exam is given during the final exam week and as such may cause some students to assume then that they have two hours instead of the usual 50 minutes as was the case for the four earlier in-class exams that semester. This is not the case and the time granted for this exam is still only 50 minutes. ***The average of the five exam scores will comprise 60% of your course grade.*** Grades for each exam are not scaled. The only scaling, (if any) that counts towards your actual course grade depends on over-all class performance and will be computed after the fifth exam. **Your performance in the lab will contribute the remaining 40% of your course grade.**

Exam location: Unless otherwise noted, all exams during the semester will be held at the Testing Center.

Exam times: During the semester, exams are held on testing days from 8:00AM on the hour until 7:00PM. You will register for an exam time and go to the testing center at that time to take your 50-minute exam.

Exams for students with special needs: If you have a documented learning disability, please see the instructor at least one week before the first exam and bring any paperwork you were given by CSD.

Makeup Exams:

Makeup Exam Policy: Makeup exams are available **only** to students who have a legitimate excuse for missing an exam, such as illness, scheduled job interview out of town, athletic team event out of town, death in the immediate family, etc. If you know in advance that you must miss an exam, see the instructor **prior to this date** and **bring documentation** to support your anticipated absence. If you miss an exam unexpectedly because of last minute illness or accident, contact the instructor when you return to campus (or by phone or e-mail if you will be away for some time) and provide **documentation** of your situation.

Makeup Exam Dates: Makeup exams will be given on the following days for those students who missed the scheduled exam and who have received **permission** to make up the exam.

Please be made aware: The makeup exam format may be strictly short-answer, short essay, multiple-choice or any combination of question styles.

Makeup for Exam I: Tuesday, 09/20/2016: 8:00AM in Torrey Life Science, Rm. 212

Makeup for Exam II: Tuesday, 10/11/2016, 8:00AM in Torrey Life Science, Rm. 212

Makeup for Exam III: Tuesday, 10/24/2016, 8:00AM in Torrey Life Science, Rm. 212

Makeup for Exam IV: Thursday, 11/17/2016, 8:00AM in Torrey Life Science, Rm. 212

Makeup for Exam V: To be announced.

Laboratories:

The MWF 9:05 AM lecture is linked with lab sections 001L – 016L. The MWF 10:10 AM lecture is linked with lab sections 020L – 033L. **You must attend the lecture and lab for which you are registered.** Even though labs are identical in content, it is not possible for us to "mix and match" by allowing students in one lecture section to attend labs linked to the other lecture section.

- (1) **Laboratory start date:** Labs begin the first week of classes, **Tuesday, August 30th.**
- (2) **Location:** Bronwell (Engineering III) rooms 118,119,120 - Check your class schedule for your room assignment.
- (3) **Information:** Lab syllabus, lab schedules, TA and assignment information are posted on the **Lecture HuskyCT site**. Click on the "**Laboratory Information**" icon for these listings. Only lab grades are recorded in the Laboratory HuskyCT site.

(4) Please see the Laboratory Syllabus for the following: Attendance Policy, Laboratory Makeup Policy, Dissection Policy and Laboratory Grading Policy.

Academic Misconduct Policy:

UConn's Policy: A fundamental tenet of all educational institutions is academic honesty; academic work depends upon respect for and acknowledgement of the research and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned.

Academic misconduct includes, but is not limited to the following:

- Providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation (e.g. papers, projects, and examinations).
- Any attempt to influence improperly (e.g. bribery, threats) any member of the faculty, staff, or administration of the University in any matter pertaining to academics or research.
- Presenting as one's own work the ideas or words of another for academic evaluation.
- Doing unauthorized academic work for which another person will receive credit or be evaluated.
- Presenting the same or substantially the same papers or projects in two or more courses without the explicit permission of the instructors involved.

A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation, and shall be subject to the sanctions and other remedies described in **The Student Code** at <http://www.dos.uconn.edu/>

Lecture Schedule

Part I: Cells-Molecules-Energy-Transport-DNA

<u>Date</u>	<u>Lecture Topics</u>	<u>Text Readings</u>
Mon. 08/29	Molecules of Life: Water and Carbon: The Chemical Basis of Life	pp 55-75
Wed. 08/31	Molecules of Life: Water and Carbon: The chemical basis of life: continued	pp 55-75
Fri. 09/02	Molecules of Life: Protein Structure and Function	pp 78-91

Mon. 09/05	Labor Day, no class	
Wed. 09/07	Molecules of Life: Nucleic acids and RNA	pp 93-104
Fri. 09/09	Molecules of Life: An Introduction to Carbohydrates	pp 107-117
Mon. 09/12	Molecules of Life: Lipids, Membranes and the First Cells	pp 119-138
Wed. 09/14	Cell Structure and Function: Introduction to Metabolism	pp 171-186
Fri. 09/16	Cell Structure and Function: Cellular Respiration and Fermentation	pp 189-208
Mon. 09/19	Testing Center: Exam I	
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Wed. 09/21	Gene Structure and Expression: The Cell Cycle	pp 253-268
Fri. 09/23	Gene Structure and Expression: Meiosis	pp 271-286
Mon. 09/26	Gene Structure and Expression: Meiosis continued.	
Wed. 09/28	Gene Structure and Expression: DNA, Gene Synthesis and Repair	pp 316-332
Fri. 09/30	Gene Structure and Expression: How Genes Work	pp 335-346
Mon. 10/03	Gene Structure and Expression: Transcription, RNA Processing and Translation	pp 348-363
Wed. 10/05	Cell Structure and Function: Cell-Cell Interactions	pp 234-247
Fri. 10/07	Testing Center: Exam II	
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Mon. 10/10	Gene Structure and Expression: Mendel and the Gene	pp 289-312
Wed. 10/12	Gene Structure and Expression: Mendel and the Gene Continued	pp 288-312
Fri. 10/14	Gene Structure and Expression: Control of Gene Expression in Bacteria	pp -367-376

Mon. 10/17	Gene Structure and Expression: Control of Gene Expression in Eukaryotes	pp 379-393
Wed. 10/19	Gene Structure and Expression: Analyzing and Engineering Genes	pp 398-415
Fri. 10/21	Gene Structure and Expression: continued	pp 398-415
Mon. 10/24	Testing Center: Exam III	

Part II. Animal Structure and Function

<u>Date</u>	<u>Lecture Topics</u>	<u>Text Readings</u>
Wed. 10/26	How Animals Work: Structure and Basic Physiology	pp 818-826
Fri. 10/28	How Animals Work: Surface/Volume Ratio and Bioenergetics	pp 826-834
Mon. 10/31	How Animals Work: Basic Nutrition	pp 855-860
Wed. 11/02	How Animals Work: Steps of Digestive Processes	pp 860-871
Fri. 11/04	How Animals Work: Gas Exchange	pp 874-888
Mon. 11/07	How Animals Work: Circulation, blood composition and cardiovascular diseases	pp 888-896
Wed. 11/09	How Animals Work: Osmoregulation	pp 836-844
Fri. 11/11	How Animals Work: Kidney Structure and Function	pp 844-852
Mon. 11/14	How Animals Work: Completion Kidney Structure	
Tue. 11/15	Testing Center: Exam IV	
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Wed. 11/16	How Animals Work: Electrical Signals in Animals, (I)	pp 899-908
Fri. 11/18	How Animals Work: Electrical Signals in Animals, (I)	pp 908-913

11/20-27	Thanks Giving Recess	
Mon. 11/28	How Animals Work: Musculoskeletal systems and Movement.	pp 942-950
Wed. 11/30	How Animals Work: Chemical Signals in Animals, (I)	pp 961-970
Fri. 12/02	How Animals Work: Chemical Signals in Animals, (I)	pp 970-978
Mon. 12/05	How Animals Work: Reproductive Cycles	pp 999-1002
Wed. 12/07	How Animals Work: The Immune System, (I)	pp 1008-1013
Fri. 12/09	How Animals Work: The Immune System, (II)	pp 1013-1026
Exam V	To be announced Note: Material Covered: (11/16-12/09)	

Attention Students:

Final exam week for Fall 2016 takes place Monday, 12/12 through Sunday 12/18. Students are required to be available for their exam during that time. Students must visit the Dean of Students Office if they cannot make their exam. The DOS will give the student his or her instructions thereafter.

Please note: vacations, previously purchased tickets or reservations, weddings (unless part of the wedding party), and other large or small scale social events, are not viable excuses for missing a final exam. Please contact the Dean of Students office with any questions. Thank you in advance for your cooperation.

Have a Great Semester!