



I. Course Information

Course: BIOL 1500 - Biology I/Lab

Semester Credit Hours: 4.0

Course CRN and Section: 20509 - EV1, 20512 - EV2

Semester and Year: Fall 2017

Course Start and End Dates: 08/21/2017 - 12/10/2017

II. Instructor Information

Name: Hauer, Gwen

Email: gh109@nova.edu

Office Hours:

Day	Time	Location
MTWRF	9:00pm - 5:00pm	Zoom

You can email ghauer@nova.edu to set up a zoom meeting

Office Hours:

Office: Parker 1st floor room 104; Carl DeSantis 1019

Office Hours: Wednesday-Friday. Sign-up sheet for Office hours on Blackboard.

E-mail: gh109@nova.edu

This course is administered by the Department of Biological Sciences. If the instructor cannot be reached, please contact the Department of Biological Sciences at 954-262-8424.

III. Class Schedule and Location

CRN	Day	Date	Time	Location	Building/Room
20509	M	08/21/2017 - 10/02/2017	6:00 PM - 8:45 PM	Ft Lauderdale/Davie Campus	Parker Building-217
20509	W	08/23/2017 - 08/23/2017	6:00 PM - 8:45 PM	Ft Lauderdale/Davie Campus	NSU Library-EC2061
20509	W	08/23/2017 - 10/04/2017	6:00 PM - 8:30 PM	Ft Lauderdale/Davie Campus	Parker Building-338
20509	W	10/11/2017 - 10/11/2017	6:00 PM - 8:00 PM	Ft Lauderdale/Davie Campus	Parker Building-338

20509	M	10/16/2017 - 11/27/2017	6:00 PM - 8:45 PM	Ft Lauderdale/Davie Campus	Parker Building-217
20509	W	10/18/2017 - 11/29/2017	6:00 PM - 8:30 PM	Ft Lauderdale/Davie Campus	Parker Building-338
20509	W	12/06/2017 - 12/06/2017	6:00 PM - 8:00 PM	Ft Lauderdale/Davie Campus	Parker Building-338
20512	W	08/23/2017 - 10/04/2017	6:00 PM - 8:30 PM	Ft Lauderdale/Davie Campus	Parker Building-338
20512	F	08/25/2017 - 08/25/2017	9:00 AM - 11:45 AM	Ft Lauderdale/Davie Campus	NSU Library-EC2061
20512	F	08/25/2017 - 10/06/2017	9:00 AM - 11:45 AM	Ft Lauderdale/Davie Campus	Parker Building-217
20512	W	10/11/2017 - 10/11/2017	6:00 PM - 8:00 PM	Ft Lauderdale/Davie Campus	Parker Building-338
20512	W	10/18/2017 - 11/29/2017	6:00 PM - 8:30 PM	Ft Lauderdale/Davie Campus	Parker Building-338
20512	F	10/20/2017 - 12/01/2017	9:00 AM - 11:45 AM	Ft Lauderdale/Davie Campus	Parker Building-217
20512	W	12/06/2017 - 12/06/2017	6:00 PM - 8:00 PM	Ft Lauderdale/Davie Campus	Parker Building-338

IV. Course Description

An introduction to the biological sciences for students interested in pursuing a career in this area. Includes subcellular and cellular organization, structures/function, biochemistry, classical/molecular genetics, and population dynamics - all arranged around evolution as a major theme. Includes laboratory sessions. Prerequisites: MATH 1040 or higher and COMP 1000 or higher. Experiential Education and Learning (ExEL): Successful completion of this course satisfies 1 ExEL unit. Frequency: Every Fall and Winter.

V. Course Objectives / Learning Outcomes

- 1) Demonstrate an understanding of the chemical foundations and molecular diversity of living organisms and how these components are used to coordinate cellular activities.
- 2) Describe the structures and functions of prokaryotic and eukaryotic cells.
- 3) Explain the complex metabolic pathways involved in energy acquisition and utilization, as well as, coordination of cellular activities.
- 4) Demonstrate a familiarity with the mechanisms of inheritance, genetic disorders, gene expression, as well as, the use of and recent developments in biotechnology.
- 5) Produce scholarly laboratory reports, which demonstrate an understanding of the scientific method and basic statistical analyses, as well as, the ability to read and interpret data.
- 6) Demonstrate knowledge of ethical, historical, and contemporary issues related to life science at the cellular and molecular levels.

VI. Materials and Resources

Book Url: [NSU Book Store](#)

Section Required Texts and Material:

TEXT: Urry, L., Cain, M., Wasserman, S., Minorsky, P., Reece, J. B., 2017. Campbell Biology, 11th Edition, Benjamin Cummings, San Francisco, CA. This comes with a CD ROM which contains study materials. Text: ISBN-13: 978-0-13-409341-3; eText: ISBN-13: 978-0-13-415974-4

Textbook Website Access: www.campbellbiology.com and www.masteringbio.com Access to this website comes free of charge with new textbooks. If you have a used textbook, access to the website can be purchased online. You should access this website for practice quizzes and other helpful supplemental material.

Section Supplemental Material:

Blackboard ACCESS: You must be able to access the site for this course through Blackboard to view lectures, notes as well as read assignments. The address is: <http://mako.nova.edu> (You can also login from the NSU homepage www.nova.edu by clicking on Blackboard in the upper right corner of the screen (under Quick Links). You must have a working NSU e-mail account including username and password (same as for checking your e-mail at your NSU account). To make sure that you can view the material at this website try going to the website and logging in. You should see your course listed ¹BIOL1500 lecture as well as a ²General Biology I/Lab site. If you do not, or have any difficulty doing this, e-mail me, see me after class, or contact a computer lab assistant and the Nova computer help desk (262-4357). Make sure you are entering the BIOL 1500 Course for the current semester.

VII. Course Requirements

Department of Biological Sciences Academic Honesty Policy: Any impropriety (e.g., cheating/plagiarism) on examinations and/or any coursework or enabling any such impropriety may constitute grounds for failing the course. A form describing any academic misconduct will be sent to the Dean's office and kept in the offending student's permanent record. Further disciplinary action may occur at the level of the University according to the University catalog section on academic integrity http://www.nova.edu/undergraduatestudies/forms/2016-17_undergraduate_catalog.pdf

VIII. Course Schedule and Topic Outline

Course Schedule:

Week	Date	Topic	Reading
1	Aug 23	Intro to Course; Biological Themes; Study of Life	Ch. 1
2	Aug 30	Study of Life (cont.) Chemistry of Life	Ch. 1 Ch. 2
3	Sept 6	Water & Fitness of the Environment Carbon and molecules, Carbon bonds, ATP; Quiz #1 opens Sept 6-Sept 13	Ch. 3 Ch. 4
4	Sept 13	Carbon bonds, ATP (cont.) Structure & Function of Macromolecules; Quiz #2 opens Sept 13-Sept 20	Ch. 4 Ch. 5
5	Sept 20	Exam 1 (CH 1-5) Tour of the cell; Membrane Structure & Function;	Ch. 6, 7
6	Sept 27	Intro to Metabolism Quiz #3 opens Sept 27-Oct 4	Ch. 8

7	Oct 4	Cell Respiration	Ch. 9
8Exams	Oct 11	MID-TERM WEEK - Exam 2 (CH. 1-8) Lecture Classroom 6-8PM	
9	Oct 18	Photosynthesis Respiration and Photosynthesis compared Quiz #4 opens Oct 18-Oct 25	Ch. 10
10	Oct 25	Cell Cycle (& Mitosis)	Ch. 12
11	Nov 1	Meiosis & Sexual Life Cycle; Mendel & the Gene Idea	Ch. 13, 14
12	Nov 8	Mendel & the Gene Idea (cont.) ; The Chromosomal Basis of Inheritance	Ch. 14; 15
13	Nov 15	Exam 3 (CH 9-14) Intro to Molecular Basis of Inheritance	Ch. 16
14	Nov 22	<i>Thanksgiving Holiday No Classes University Closed Nov 24-25</i>	
15	Nov 29	Molecular Basis of Inheritance Intro to From Gene to Protein Quiz #5 opens Nov 29-Dec 6	Ch. 16 Ch. 17
16 Exams	Wednesday Dec 6	FINAL EXAM WEEK – Last Exam (CH 1-17) Lecture Classroom 6-8PM	

IX. Assessments

DESCRIPTION OF EXAMS & ASSIGNMENTS

A. Unit exams (45% of final grade):

There will be **3 unit exams** during the semester, each one worth 100 points and be in the form of a basic multiple choice and several short answer questions. Exams will begin immediately at the start of the class. Exams will be 70-100 questions long. You may not make up exams unless given PRIOR permission. Do not show up the following class expecting me to simply allow a make-up – it won't happen. You will be given a zero for that exam! However, if you have an approved excuse **in writing** as death in the family, or hospitalization, (as per the NSU student catalog) consideration will be given to allow for an arranged make-up time. Make-up exams must be taken prior to my posting grades for the exam to the class.

B. Final Exam (15% of final grade):

The final exam will consist of a 100 point exam that will include new material and material from the previous chapters. The final exam will consist of 50% last unit material and 50% cumulative information. It is important you review previous chapter material often (study guides, notes, handouts) throughout the semester for this final exam.

C. Lecture quizzes (15% of final grade):

There will be four to five (~10 min.) quizzes given over the course of the semester. These will be very important as some questions are similar to test questions. Quizzes will cover the material from the previous weeks and/or the assigned readings.

D. Lab activities (25% of final grade):

Grades for lab work will be based on worksheets, graphs, tables, and quality of work in the lab. Grades

also include attendance, lab quizzes, and the formally written laboratory report. The lab syllabus and lab calendar for weekly laboratory details will be posted in lab class on blackboard.

X. Grading Criteria

Your final grade is determined by your performance on a number of different tasks:

Percentage	Final Grade
93.0 and above	A
90.0-92.9	A-
87.0-89.9	B+
83.0-86.9	B
80.0-82.9	B-
77.0-79.9	C+
73.0-76.9	C
70.0-72.9	C-
67.0-69.9	D+
60.0-66.9	D
59.9 and below	F

XI. Course Policies

Department of Biological Sciences Statement on Academic Misconduct: Any impropriety (e.g., cheating/plagiarism) on examinations and/or any coursework or enabling any such impropriety may constitute grounds for failing the course. A form describing any academic misconduct will be sent to the Dean's office and kept in the offending student's permanent record. Further disciplinary action may occur at the level of the University according to the University catalog (http://www.nova.edu/undergraduatestudies/forms/2017-2018_undergraduate_catalog.pdf) - section on academic integrity.

COURSE REQUIREMENTS AND POLICIES:

A. Attendance is required at all lectures, labs, and exams. Absence from class may adversely affect your grade since you will not be present to hand in assignments and you will miss course material. There will be no make up quizzes or laboratories unless exceptional conditions occur as defined in the College catalog. In the case of a truly exceptional condition, **prior** permission from your professor is required. It is your responsibility to contact me before you miss a class or assignment! **Expect to provide documentation of your emergency. It is University policy.**

B. It is the student's responsibility to obtain notes on missed material from other students and/or from notes posted in Blackboard or elsewhere on the internet. Caution: These notes may differ from those given in class. You are responsible for the information given in class. Check Blackboard often as practice quizzes and announcements will be posted.

C. All assignments are due at the beginning of the class indicated in either lecture or laboratory sessions. LATE ASSIGNMENTS WILL HAVE POINTS DEDUCTED.

D. Any impropriety (e.g., cheating, plagiarism, etc) on exams, quizzes or lab write-ups will constitute grounds for failing the entire course. All assignments are monitored for authenticity by specialized, state-of-the-art plagiarism-detecting software (turnitin.com). If you take materials (text or figures from a source, be sure to **cite the source** and if it is an exact passage -put the text in quotation

marks). **You do not want to end up experiencing the consequences of plagiarism especially as a result of poor techniques!! See me if you have questions on in text citations.**

E. A brief quiz will be given online (blackboard), quiz dates will be specified during the prior class, on the material from the prior week or assigned reading. Quizzes will be short answer or multiple choice and will last about 20 mins. The dates for the quiz are noted on the lecture schedule (syllabus). **NO** make-ups or overtime will be offered.

F. Questions and comments will help to make the learning environment more stimulating and enjoyable for everyone. I strongly encourage you to ask questions during class! This will not only help your comprehension, but it will help your classmates as well. If you still do not understand a concept, please come to see me during my office hours or email me ASAP.

G. Your best strategy for success in this course is to attend class and pay attention during lecture. Electronic devices for note taking are not advised (ie. hand held devices, computers, iPad). I write a lot on the board and suggest my students copy these notes/drawings as most items will be on the exam. Take notes on the study/reading guide I have provided you. Review & rewrite your notes as soon after each class as you can to be sure that they are clear and concise. I also strongly recommend you form study groups of 3 to 5 students. As a group, it may help to make flash cards from your notes with the material worded in the form of questions to quiz each other, or to write your own *practice questions* using the course material and then take them without looking at your notes. Review Study guides are posted on Blackboard or handed out in class that will help focus on required material.

H. Be considerate to the instructor and your fellow students. Be on time to lecture and lab. If you are consistently late points will be deducted. It can be very disruptive to others to enter during the quiz or note taking. It hampers the flow of information, and again, you will **not** be given extra time to take quizzes or tests because of tardiness. Also, **turn off cell phones BEFORE class begins.** Electronic devices are not allowed in class. Lastly, please **respect the opinions and viewpoints of others** when we are involved in lecture and lab discussions. The academic forum is about the exchange of ideas.

I. ACADEMIC HONESTY POLICY

Academic dishonesty is unfair to all students as well as the instructor and WILL NOT BE TOLERATED. The infraction will result in a grade of zero and may result in removal from the course.

REMEMBER (As outlined in the catalog): Academic honesty is required and expected. In the event that you are suspected of classroom cheating, plagiarism, or otherwise misrepresenting your work, you will be subject to University-level disciplinary action, and you may fail the course.

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

1. Cheating on an examination or quiz. Taking information or allowing information to be taken from another's test or assignments.
2. Receiving help from others in work to be submitted; if contrary to the rules of the course.
3. Plagiarizing the ideas, writings, or work of another (including but not limited to your textbook and the Internet) without citing the source. Resubmitting previous submitted work is also technically plagiarism and is detected using plagiarism detection software.
4. Stealing or illegally using examinations or course material from current or past semesters or classes. Giving or selling answers to test questions and informing another student of specific questions that appears or has appeared on course examinations.
5. Misrepresentation is an act of omission with intent to deceive the instructor or University Employee. It includes but is not limited to, lying about family circumstances, employment conflicts, fraudulent notes, or other personal problems in order to gain academic advantage for oneself or others. Also changing answers on graded materials; having another person complete an assignment or take an examination in one's place. All are academic misconduct.
6. **DO NOT GIVE ANYONE YOUR WORK IN WRITTEN OR ELECTRONIC FORM**
– Assistance with writing and biological concepts are available from the instructor and tutors through Academic Services located in the Student affairs bldg. (954) 262-8350
7. **Assisting anyone to do any of the above.**

XII. University Policies

Students should visit <http://www.nova.edu/academic-affairs/nsu-syllabus-policy.html> to access additional required college-wide policies. It is your responsibility to access and carefully read these policies to ensure you are fully informed. As a student in this class, you are obligated to follow these college-wide policies in addition to the policies established by your instructor.

The following policies are described on this website:

- Academic misconduct
- Last day to withdraw
- Email policy
- Student course evaluations
- Student responsibility to register
- Student responsibility for course prerequisites

Academic Resources

Nova Southeastern University offers a variety of resources that may aid in student success. Among these resources are:

Accommodations for students with documented disabilities: For more information about ADA policy, services, and procedures, students may call the Office of Student Disability Services at 954-262-7189 or visit <http://www.nova.edu/disabilityservices>.

Tutoring and testing center:

Students are encouraged to use the free, individualized tutoring services offered by the Tutoring and Testing Center (TTC). TTC provides a supportive atmosphere in which tutors and students work collaboratively on improving students' writing, math and/or science skills. <http://www.nova.edu/tutoring-testing/index.html>