

🌀 Biology 1101 🌀

(Lec # 4192)

Autumn 2018

The Ohio State University at Newark

Instructor: Dr. Shauna Weyrauch

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Office Hours: 1:00-2:15 Tuesdays, 10:00-11:15 Thursdays, and by appointment.

Lectures: Mondays and Wednesdays, 8:00-9:50, in room 1160 FH

Laboratories: Thursdays or Fridays, 8:00-9:50, in FH 2126

Textbook (required): *Campbell Essential Biology*, 7th Edition, by Simon, Dickey, and Reece (e-text with Mastering Biology).

Lecture Schedule

Week #	Monday	Wednesday
1		<u>August 22: Ch. 1</u> Introduction to course; Learning about Life; Science as a Process
2	<u>August 27: Ch. 1, cont'd</u> Learning about Life; Science as a Process	<u>August 29: Ch. 2</u> Essential Chemistry
3	<u>Sept. 3:</u> Labor Day – No Classes	<u>Sept. 5: Ch. 3</u> Molecules of Life
4	<u>Sept. 10: Ch. 4-5</u> Cells; The Working Cell	<u>Sept. 12: Ch. 6-7</u> Cellular Respiration; Photosynthesis
5	<u>Sept. 17:</u> Review for Midterm Exam #1 (Ch. 1-7)	<u>Sept. 19:</u> Midterm Exam #1 (Ch. 1-7)
6	<u>Sept. 24: Ch. 8</u> Cellular Reproduction	<u>Sept. 26: Ch. 9</u> Patterns of Inheritance

7	<u>Oct. 1: Ch. 9 cont'd</u> Patterns of Inheritance	<u>Oct. 3: Ch. 10</u> Structure & Function of DNA
8	<u>Oct. 8: Ch. 11 & 12</u> How Genes are Controlled; DNA Technology	<u>Oct. 10:</u> Film: <i>The Ghost in Your Genes</i>
9	<u>Oct. 15: Ch. 13</u> How Populations Evolve	<u>Oct. 17: Ch. 14</u> How Biological Diversity Evolves
10	<u>Oct. 22: Ch. 15</u> The Evolution of Microbial Life	<u>Oct. 24:</u> Review for Midterm #2 (Ch. 8-15 plus film)
11.	<u>Oct. 29:</u> Midterm Exam #2 (Ch. 8-15)	<u>Oct. 31: Ch. 16</u> Evolution of Plants & Fungi
12	<u>Nov. 5: Ch. 17</u> Evolution of Animals	<u>Nov. 7: Ch. 17, cont'd</u> (A) Evolution of Animals, cont'd (B) Film: <i>Rise of Animals</i>
13	<u>Nov. 12:</u> Veterans Day observed No Classes	<u>Nov. 14: Ch. 18</u> Introduction to Ecology
14	<u>Nov. 19:</u> Film: <i>Years of Living Dangerously</i>	<u>Nov. 21:</u> Thanksgiving Holiday – No Classes
15	<u>Nov. 26: Ch. 19</u> Population Ecology	<u>Nov. 28: Ch. 20</u> Community Ecology
16	<u>Dec. 3:</u> Conservation of Endangered Species (“Lions, Tigers & Bears, Oh My!”): A Lecture & Discussion Session	<u>Dec. 5:</u> Review for Final Exam [<i>Note: review will cover new material only (ch. 16-20) but final is comprehensive</i>]

FINAL EXAM (Comprehensive): Monday, December 10th, 8:00-9:45am

LABORATORY SCHEDULE

Week	Date	Bio 1101 Lab Schedule
1	Aug 23, 24	No labs
2	Aug 30, 31	Lab 1: Osmosis & diffusion
3	Sep 6, 7	Lab 2: Microscopes & cells
4	Sep 13, 14	Lab 3: Photosynthesis
5	Sep 20, 21	Lab exam 1
6	Sep 27, 28	Lab 4: Mitosis & meiosis
7	Oct 4, 5	Lab 5: Biotechnology & genetics
8	Oct 11, 12	No labs: Autumn break
9	Oct 18, 19	Lab 6: Microevolution
10	Oct 25, 26	Lab exam 2
11	Nov 1, 2	Lab 7: Macroevolution
12	Nov 8, 9	Lab 8: Flowers, Fruits & Seeds
13	Nov 15, 16	Lab 9: Animal diversity
14	Nov 22, 23	No labs: Thanksgiving holiday
15	Nov 29, 30	Lab exam 3

Grading

Lecture Exams: There will be three exams, including the final. The final is cumulative. The midterm exams are worth 150 points each, the final is worth 200 points. The format of exams is multiple-choice and true/false. Total Points = 500

Labs: You will meet in FH 2126 on Thursdays or Fridays for laboratory. Laboratory activities are designed to reinforce lecture concepts. It is critical that you complete and comprehend all laboratory activities, as there will be three lab exams testing your knowledge of laboratory material. The lab exams will be worth 50 points each and the format may include a variety of types of questions, including fill-in-the-blank, labeling, true/false, multiple-choice, etc. Total Points = 150.

Lecture Attendance & Bonus Points: I will periodically offer bonus points for participation in lecture activities and/or attendance. Bonus activities will not be announced ahead of time, and cannot be made up.

TOTAL POINTS FOR CLASS = 650

Grading Scale:

A = \geq 93%	A- = 90-92%	
B+ = 87-89%	B = 83-86%	B- = 80-82%
C+ = 77-79%	C = 73-76%	C- = 70-72%
D+ = 67-69%	D = 60-66%	
E = < 60%		

An Important Notice About Making Up Work:

Your attendance in lecture and lab is expected, and only under the most severe circumstances will make-up work be permitted.

There are NO opportunities for making up the final exam. If you miss a midterm exam or lab exam, this is the procedure for making it up:

- 1) Contact me within 3 days of the absence, to let me know that you desire to make up an exam. If you wait longer than 3 days to contact me, you will not be permitted to make up the exam.
- 2) Make up tests will only be permitted in the most serious, and documented, circumstances. Examples of excuses I will accept include: severe illness accompanied by a doctor's excuse; a death in the family accompanied by a note from a relative or clergy person; or a car accident or automobile problem accompanied by a police report or car repair bill. Examples of excuses I will not accept include: "I over-slept," or "I didn't know the exam was today," or "I was on vacation," or "I didn't feel well (but I don't have a doctor's excuse)." I'm sorry that this must be adhered to so strictly, but it is the only fair way to make sure make-up work is not abused.
- 3) The make-up exam must be taken in a timely manner, no more than 7 days after the absence.
- 4) All make-up exams are fill-in-the-blank and essay style questions, so prepare accordingly.

Electronic Devices in Class

You may use an iPad or laptop to access your textbook or other instructional materials during class. However, if you have a cell phone, please turn it off before entering the classroom, as they can be disruptive. You should bring a **calculator** to class. Although math problems in this class will only require a basic knowledge of algebra, calculators may be necessary to solve some problems. You may use calculators during tests, but **you will not be permitted to use computers or cell phones during tests.**

DO NOT use electronic devices to listen to music, surf the internet, text, or engage in other extracurricular activities during class. It is disrespectful to your instructor and can be a distraction for other students. If anyone is found to be using electronic devices

inappropriately during class, they will be asked to leave the classroom for the remainder of the period and will receive a **10 point deduction** on their grade (**second offense, 50 point deduction**). I hate to be so hard about this, but it really is a growing problem.

Please use common sense, and be respectful of your instructor and fellow students during class time. The classroom is a place to learn, and only through cooperation can we make it conducive to learning for all students.

Be Respectful During Class Time

It should go without saying, but be respectful of your fellow classmates and instructor during lecture and lab.

- **Do not talk during lecture** – it makes it difficult for others to hear
- **Do not sleep during class** – it is rude, and can be distracting to others
- **Arrive to class on time** – coming in late is disruptive
 - **IMPORTANT NOTE: If you arrive late for an exam, you will not be permitted to take the test if any other student has already turned in the test!**

If you engage in disrespectful behavior during class, the same policy of point deductions as outlined above for abuse of electronics during class will apply.

Conduct During Exams

Be sure to arrive on time for exams. If you are late to an exam (beyond the point at which someone has already turned in his/her exam), you will not be permitted to take the test at that time. Tardiness will be treated like an absence, and you will need to provide documentation of an emergency in order to take a makeup exam (see “*An Important Notice About Making Up Work*” above).

Once the exam has begun, you will not be permitted to leave to use the restroom and then return to continue taking the test. Please make sure to **use the restroom before** the exam begins. (Note: if you have a medical condition which may make leaving the classroom during an exam to use the restroom necessary, please provide documentation at the beginning of the semester).

Accommodations for Students with Disabilities

If you have a disability for which you require special accommodations, please contact me early in the quarter so that I can work with you to meet your needs and ensure your classroom experiences are rewarding. You may also wish to contact the Office of Disability Services at 226 Warner Center (online at http://www.newarkcampus.org/studentlife/Disability_Services/default.asp). They can be of great assistance in providing testing accommodations and other services.

Academic Misconduct

Academic misconduct is defined by the Code of Student Conduct as "[a]ny activity that tends to compromise the academic integrity of the University, or subvert the educational process." I encourage you to review the Code of Student Conduct (online at http://studentaffairs.osu.edu/resource_csc.asp), as University rules and policies related to academic integrity will be enforced. Instances of academic misconduct, including plagiarism and cheating on tests or quizzes, will be referred to the Committee on Academic Misconduct.

Goals of this Course

As a general education course, BIO 1101 fulfills the requirements for a natural sciences course, helping you to gain a better understanding of the biological world. The College of Arts and Sciences requests that the following information about this course be provided here:

Goals:

Students gain understanding of the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential of science and technology to address problems of the contemporary world.

Expected Learning Outcomes:

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students understand key events in the development of science and recognize that science is an evolving body of knowledge.
3. Students describe the inter-dependence of scientific and technological developments.
4. Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

This course attempts to meet these goals by working towards students' ability to:

- Recall current and historical aspects of energetics, genetics, evolution, ecology, and cellular structure & function.
- Describe biological processes related to energetics, genetics, evolution, ecology, and cellular structure & function.
- Analyze the current and future significance of energetics, genetics, evolution, ecology, and cellular structure and function on society.
- Apply skills that demonstrate their scientific literacy by communicating about the content and validity of articles related to science in the popular press.
- Value the study of biology.
- Demonstrate an understanding of the nature of science. This includes (1) the way that scientists develop and evaluate explanations of natural phenomena using criteria fundamental to scientific inquiry and (2) the understanding that science is a human endeavor.
- Work productively and effectively in a group.