

BIOLOGY 11B HYBRID: Biology for Science Majors II

Fall 2021

Instructor: Ms. Smith Bush

Office Hours: Monday, Wednesday & Friday 3:00-4:30pm Online via Canvas messaging.

Zoom meetings as requested.

E-mail: bethany.bush@reedleycollege.edu

Lecture online and asynchronous; Lab T & Th 2:00-4:50pm LFS 11

In person lab meeting days: 8/10, 8/17, 8/19, 8/24, 8/26, 8/31, 9/2, 9/21, 9/23, 9/28, 9/30.

I. COURSE DESCRIPTION

A. Title: Biology 11B – Biology for Science Majors II

B. Prerequisite: BIOL 11A

C. Catalog Description: This course is the second-semester course of a two-semester sequence of general biology. Students will study the origins of life, the evolutionary history of biological diversity, plant form and function, animal form and function, and ecology. This course is intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors.

D. Course Outcomes

Upon completion of this course, students will be able to:

- A. evaluate the biological sciences through references to historical discoveries and recent contributions;
- B. demonstrate knowledge of plant and animal taxonomies as they relate to evolutionary history;
- C. compare and contrast functional systems of living organisms and identify how these systems work physiologically together to maintain homeostasis;
- D. use inductive and deductive reasoning in any environmental or ecological issue;
- E. evaluate scientific literature and current biological advances

II. REQUIRED MATERIALS:

A. Required Texts:

Biology by Raven et al., 12th Edition with access to the Learnsmart component of the textbook.

B. Required Equipment and Materials:

1. Active Learnsmart code.
2. Computer and internet access

III. COURSE WORK AND EXAMS

A. Reading assignments: You are responsible for learning the material in the assigned readings regardless if it was discussed in lecture. If you have any problems

understanding reading material, I encourage you to seek my assistance. It is encouraged that you read the material to be discussed for the day before the class meeting. Doing this will not only make you a more active participant in the entire learning process, it will greatly increase what you get out of the class.

B. Learnsmart assignments (10 pts. each): Each student will be required to purchase an active access code for the Learnsmart component of the textbook. I will assign a Learnsmart assignment for each chapter we cover in the class. You will have one week to complete each assignment.

C. Semester Project (100 pts.): A semester research project will be required. More on this later.

D. Lecture/lab Exams: There will be 4 major exams worth 100 points each. Additionally, there will be one cumulative final exam worth 200 points. Exams will be multiple choice, short answer and essay. Exams will include information from lecture, Learnsmart, lab and your reading assignments. Additionally, lab exam material may include photographic slides or pictures of specimens.

E. Labs (10 pts each): Laboratory work is a crucial component of this course. Do not treat laboratory material as separate material from the lecture component of the course. I have constructed this class so that the materials in these two components complement each other. Various points will be assigned for lab work

F. Extra Credit: Up to 25 extra credit points will be assigned throughout the semester.

V. ATTENDANCE: You will be considered absent if you fail to participate in the weekly online discussions/postings, assignments, and quizzes. After one week of no communication, you may be dropped from the course.

~~~Simply Logging in to the Course Is Not Considered Attendance~~~

**** If you fail to participate in the first introductory online discussion by midnight the first week of class Wednesday, you will be dropped from the class. Students who do not purchase and use a Learnsmart access code by the end of the second week will be dropped from the class.**

VI. GRADING:

A.

90 – 100% =A, 80 – 89% =B, 70 – 79% =C, 60 – 69% =D, 59% and Below =F

At any point you can check your grades on our Canvas class site under gradebook. You are encouraged to check this site regularly and keep track of your own grades! Additionally, all handouts and class notes for our class will be available on this site.

Assignments	Points
Labs (26 @10).....	260
Learnsmart (32 @ 10).....	320
Exams (4 @ 100).....	400
Final Exam (1 @ 200).....	200
Project (1 @ 100).....	100
Total Points	1280

B. Policy for missed exams: You have one week to make-up any missed lecture exam. After one week any missed grade may not be made up unless prior written arrangements have been made to ensure quality work and fairness to the instructor and the other students. ***Exams taken late will be docked 10% each day late unless a medical excuse is provided.***

C. Policy for missed labs: You may turn in late lab work up to 1 week after the due date. You will be docked 10% each day for late work.

VII. Other information:

A: Drops: You have until the 9th week of school to drop. If you elect to do so, be sure to drop yourself. Do not assume you have been automatically dropped. This is very important, as after the 9th week a grade must be give, by state law, whether you attend class or not.

VIII. Academic Dishonesty :

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entire honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences. See college catalog for details.

VIII. If you have a verified need for an academic accommodation or material in alternate media (i.e. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

VIV. Diversity Statement:

Respect for Diversity: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for

other students or student groups.

VV. Help: If you should have difficulty grasping the material presented during the course be sure to see your instructor at the first sign of trouble. Often, a few minutes can clear up many problems! If you are having trouble studying, perhaps you need a few study hints or a tutor at the Tutorial Center. Please come in for help!

Always keep in mind that this is a five-unit course. As a general rule, each hour of lecture requires two hours of additional study outside of the classroom each week. Each hour of lab requires one hour of study time, outside the laboratory each week. This equals twelve hours of study each week in order to pass this class. Do your planning accordingly.

Success comes before work only in the dictionary. Overall, I hope you have a fun semester and learn Biology along the way. Good Luck.

Biology 11B Hybrid Schedule

Fall 2021

Week	Lecture & Learnsmart (online)	Lab (in person unless noted)	Other Assignments	
1	UNIT 1 Ch.25 The Diversity of Life	T: Lab Safety & Microscopes	SLO Pre-Survey	
	Ch.26 Viruses	Th: Viruses (online)	Introductory Discussion	
2	Ch.27 Prokaryotes	Bacteria (online)		
	Ch.28 Protists	T: Ex.22 Algae Th: Ex.23 Protozoans		
3	Ch.29 Seedless Plant	T: Ex.25 Non-Vascular Plants		
		Th: Ex.26 Seedless Vascular Plants		
4	Ch.30 Seed Plants	T: Ex.27 Gymnosperms	Carbon Footprint Analysis	
		Th: Ex.28 Angiosperms		
5	Exam #1 Bacteria - Plants UNIT 2	Fungi (online)	CF research Hypothesis	
	Ch.31 Fungi			
6	Ch.32 Animal Diversity	Porifera & Cnideria (online)	CF Data Collection (4 weeks)	
	Ch.33 Protostomes	Platyhelmenthes & Nematodes (online)		
7	Ch.34 Deuterostomes	T: Ex.34 Mollusca & Annelida		
		Th: Ex.35 Arthropoda		
8	UNIT 3 Ch.35 Plant Form	T: Ex.36 Chordates		
	Ch.36 Transport in Plants	Th: Ex.29 Plant Anatomy		
9	Exam #2 Animals & Fungi	Plant Physiology (online)		
	Ch.39 Sensory Systems in Plants			
10	Ch.40 Plant Reproduction & Development	Pollination Video (online) Flower Dissection (online)		
	UNIT 4	Animal Tissues (online)	CF Rough Draft	
11	Ch.41 Animal Body	Nervous Reflex (online)		
	Ch.42 Nervous System			
12	Exam #3 Plant Anatomy & Physiology	Bone ID (online)	CF Peer Reviews	
	Ch.45 Musculoskeletal System	Joint Movement (online)		
13	Ch.47 Respiratory System	Blood Pressure & Pulse (online) Heart Ascultation (online)		
	Ch.48 Circulatory System	Mechanisms of Breathing (online) Pulmonary Functions (online)		

14	Ch.46 Digestive System UNIT 5	Digestion & Enzymes (online) Pig Dissection (online)	
15	Ch.54 Ecology of Individuals & Populations Exam #4 Animal Anatomy & Physiology	Demography Lab (online)	
16	Ch.55 Community Ecology Ch.56 Ecosystems	Ecosystems Lab (online)	Carbon FP DUE
17	Ch.57 The Biosphere Ch.58 Conservation Biology	Carbon Lab (online) Biome Lab (online)	Extra Credit Due Friday week #17
18	Final Exam - (Cummulative)		SLO Survey