

Biology 1040 Organismal Biology Lab
Fall Semester 2020
Biology Department, College of Arts and Sciences
Valdosta State University

Instructor: Dr. Teresa H. Doscher

Office: Science Building 1098

Office Hours: Tuesday 10:00 – 11:00 am or by appointment

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Room: Science Building 1046

Midterm: October 15, 2020. This is the last day to drop this course and receive a withdrawal grade (W).

Credit Hours: 1

Course Description:

Bio 1040L Organismal Biology Lab

Co-requisite: **Bio 1030.** This course cannot be taken for credit toward the major in biology. A laboratory course to accompany Bio 1030 lecture, emphasizing the structure of multicellular organisms.

Course Objectives: This course is designed to accompany Bio 1030 by presenting exercises that emphasize the processes involved in the development and maintenance of multicellular organisms. The objective of this course is to provide students with a hands-on experience in general biology. Students will participate in the process of scientific inquiry by

COVID 19 CHANGES:

from the class and possibly dropped from the course. This student will also forfeit any points toward his or her grade from that day and will not be able to make up the lab. Refer to the Undergraduate Catalog for more information.

**TEXTING OR USING YOUR PHONE WILL NOT BE TOLERATED DURING CLASS!
YOU WILL BE ASKED TO LEAVE THE CLASS IF THIS POLICY IS BROKEN!**

Family Educational Rights and Privacy Act of 1974: It is illegal to release personal information about an individual to others. **Grades, averages, and other information will not be released to anyone but that individual; therefore, no grades will be posted or given out over the phone or email.**

Access Statement: Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please access@valdosta.edu.

Title IX Statement: Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, titleix@valdosta.edu, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

Bio 1040 Organismal Lab - Fall 2020 - Room BC 1046

Monday

GROUP A Biology 1040 Lab Schedule Fall 2020

Week 1 - Introduction, Syllabus, Safety Guidelines

August 17 - 21	1. Follow directions for downloading Connect Virtual Labs
	2. Watch the lecture titled Biol 1040 Introduction, syllabus, and safety guidelines on Connect
	3. Complete the following virtual labs listed under "Week 1 Introduction":
	Virtual Lab Tutorial
	Lab Safety - Handwashing
	Lab Safety - Personal Safety

Week 2 & 3 - Biological Macromolecules

August 24 - 28	IN-PERSON LAB - Biological Macromolecules
Aug. 31 - Sept 4	Complete the following virtual labs listed under "Week 2 & 3 Biological Macromolecules":
	Chemical Composition of Cells - Test for Sugars
	Chemical Composition of Cells - Test for Starch
	Chemical Composition of Cells - Test for Fat
	Chemical Composition of Cells - Test for Proteins

NO LABS THE WEEK OF SEPT. 7 - 11 DUE TO LABOR DAY HOLIDAY

Week 4 & 5 - Osmosis

Sept. 14 - 18	IN-PERSON LAB - Osmosis Lab
Sept. 21 - 25	Complete the following virtual labs listed under "Week 4 & 5 Osmosis Labs":
	Osmosis - Movement of Water Across a Selectively Permeable Membrane
	Osmosis - Tonicity in Elodea Cells
	Osmosis - Tonicity in Potato Strips
	Osmosis - Tonicity in Red Blood Cells

Week 6 & 7 - DNA/Genetics

Sept. 28 - Oct. 2	IN-PERSON LAB - DNA Isolation and Gel Electrophoresis
Oct. 5 - 9	Complete the following virtual labs listed under "Week 6 & 7 Genetics Labs":
	Human Genetics - Genetic Inheritance
	Mendelian Genetics - Monohybrid Fruit Fly Cross
	Mendelian Genetics - Dihybrid Plant Cross

Week 8 & 9- Senses lab

Oct. 12 - 16	IN-PERSON LAB - Senses Lab
Oct. 19 - 23	Complete the following virtual labs listed under "Week 8 & 9 Senses Labs":
	Eye and Vision - Eye Dissection
	Eye and Vision - Visual Acuity Test
	Eye and Vision - Accommodation of the Lens
	Eye and Vision - Color Vision Test
	Eye and Vision - Pupillary Reflex Test
	Eye and Vision - Convergence Reflex Test

Week 10 & 11 - Metabolism and Photosynthesis labs

Oct. 26 - 30	IN-PERSON LAB - Metabolism Lab
Nov. 2 - 6	Complete the following virtual labs listed under "Week 10 & 11 Photosynthesis Labs":
	Photosynthesis - Carbon Dioxide Uptake
	Photosynthesis - Photosynthetic Pigments
	Photosynthesis - Determining Rate in White Light
	Photosynthesis - Comparing Green and Blue Light

Week 12 & 13 - Cardiovascular labs

Nov. 9 - 13	IN-PERSON LAB - Cardiovascular Lab
Nov. 16 - 20	Complete the following virtual labs listed under "Week 12 & 13 Cardiovascular Labs":
	Blood - Blood Typing
	Blood - Differential White Blood Cell Count
	Cardiovascular Physiology - Pulse Rate
	Cardiovascular Physiology - Blood Pressure

GROUP B Biology 1040 Lab Schedule Fall 2020

Week 1 - Introduction, Syllabus, Safety Guidelines

August 17 - 21

1. Follow directions for downloading Connect Virtual Labs