

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

Instructor: Mr. Christopher Le

Office: Science Building 2025

Office Hours: By appointment (Send email)

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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 asking scientific questions, developing hypotheses, predicting outcomes of experiments, collecting and interpreting data and drawing conclusions from the results.

Learning Goal: Students will demonstrate understanding of the physical universe and the nature of science, and they will use scientific methods and/or mathematical reasoning and concepts to solve problems.

Materials: McGraw Hill Connect Online Labs. This can be purchased directly through the company (less expensive) following the directions below or an access card can be purchased through the bookstore.

The image shows a screenshot of the McGraw-Hill Connect student registration information page. At the top left is the McGraw-Hill Connect logo. The page is titled "student registration information course". Below this title are several input fields containing the following information:

- Course: Biol 1040L Organismal Biology Lab
- Instructor: Teresa Doscher
- Section: Biol 1040L Organismal Biology Lab
- Registration dates: 08/10/2020 - 12/14/2020

Below the input fields is a section titled "online registration instructions" which reads: "Go to the following web address and click the 'register now' button." Below this text is a text box containing the URL: <https://connect.mheducation.com/class/t-doscher-biol-1040l-organismal-biology-lab>. Below the URL, it says "This is a unique address for Biol 1040L Organismal Biology Lab". At the bottom, it asks "Having trouble registering? Get help here: <https://bit.ly/StudentRegistration>".

At the very bottom of the page, there is a copyright notice: "© 2020 McGraw-Hill Education. All rights reserved."

COVID 19 CHANGES: Due to COVID 19 regulations we are altering the way we teach the non-major labs. Only half of the normal number of students can be in the lab at a time. Therefore, each class will be divided into 2 groups (group A and group B). Each group will attend lab alternating weeks. The weeks that you do not have in-person labs you will have online labs to complete. All of the online labs will be through McGraw Hill Connect. You will be told whether you are in Group A or Group B. Each group has a different schedule at the end of the syllabus.

Attendance: Attendance in lab is mandatory. As per University policy; a student who misses more than 20% of the scheduled classes of a course will be subject to receiving a **FAILING** grade in the course. There will only be six in-person labs and 7 sets of online labs for you to attend/complete. So, **if you miss 3 of them (online or in-person) you automatically fail the course.**

If you are 10 minutes late to lab, you will be turned away from the lab. Lab will begin on time so if you are late and are not present for instructions and safety issues you will not attend the lab. Also, it is imperative that you attend your regularly scheduled lab. No make-up labs will be allowed due to seating limitations. So, set alerts in your phone or mark your in-person labs on a calendar so you don't miss your in-person labs. You will have a week or more to complete your weekly online labs but we cannot alter the in-person labs.

Grading: Your final grade will be determined by laboratory quizzes, laboratory reports, homework assignments, daily participation grades and online labs. **Quizzes are given at the beginning of each lab. If you are late to class or miss the class, you will not be able to make up the quiz.** If you miss the class completely, you are responsible for the material covered that class period and you must be prepared for the quiz the following class period.

I will not accept assignments or a lab report from a class that you did not attend. I will not accept any late assignments either. You will receive a daily participation grade for the in-person labs. Therefore, if you are not present you will receive a zero grade for the day.

Final Grades: Final grades are based on the following cumulative point totals. All grades will be posted on Blazeview. **This is a tentative summary of grades for the semester subject to change.**

In-person labs = 10 points each x 6 = 60 points	
Quizzes and assignments = 120 points	
Virtual labs = 5 points each x 28 = 140 points	
Total = 320 points	
A	90 - 100% 288 - 320 points
B	80 - 89.99% 256 - 287 points
C	70 - 79.99% 224 - 255 points
D	60 - 69.99% 192 - 223 points
F	below 60% below 192 points

Cheating and Plagiarism: Academic integrity is the responsibility of all VSU faculty and students. Faculty members should promote academic integrity by including clear instruction on the components of academic integrity and clearly defining the penalties for cheating and plagiarism in their course syllabi. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the faculty members' syllabi. All students are expected to do their own work and to uphold a high standard of academic ethics. A student caught cheating on a quiz, lab report, or assignment will receive a grade of zero and may receive a failing grade (F) in the course.

Each student will be required to complete his/her own lab report or assignment for certain lab experiments. Many of the experiments will be conducted as groups; however, group lab reports or lab reports identical to others in the class are not acceptable. **If two or more students turn in identical or similar lab reports or assignments, those students will receive a grade of zero on the assignment.**

Disruptive Behavior: The academic community is under a strong obligation to protect the campus community from disorderly, disruptive, or obstructive actions which interfere with academic pursuits of teaching, learning and other campus activities. Therefore, any disruptive behavior in the laboratory that interferes with the teaching of the laboratory exercises or disturbs other students or faculty will not be tolerated. **Any student that disrupts the class will be removed**

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 visit VSU's Access Office or email: 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.

Extra Help with Coursework

The Academic Support Center (ASC) offers all VSU students free peer tutoring in core curriculum courses, including math, writing (any subject), chemistry, biology, foreign languages and more. Please bring your assignments, textbooks, and homework to tutoring sessions. Also available are free, one-hour seminars for help with study skills, time management, and a variety of other topics. Visit our office on the main campus, located in Langdale Residence Hall, or call 229-333-7570 for an appointment, or visit the website where you can make appointment for yourself (www.valdosta.edu/asc).

Bio 1040 Organismal Lab - Fall 2020 - Room BC 1046

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM					
8:30 AM					
9:00 AM					
9:30 AM					
10:00 AM	Bio 1040 Lab A Doscher 10 - 11:50	Bio 1040 Lab G Castellano 10 - 11:50	Bio 1040 Lab L Burch 10 - 11:50		
10:30 AM					
11:00 AM					
11:30 AM					
12:00 PM			Bio 1040 Lab M Le 12 - 1:50		
12:30 PM					
1:00 PM					
1:30 PM					
2:00 PM		Bio 1040 Lab I Le 2 - 3:50			
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM			Lab meeting Lab meeting Lab meeting Lab meeting		
4:30 PM					
5:00 PM					
5:30 PM					

Faculty

Dr. Teresa Doscher
Mr. Christian Burch
Mr. Damion Castellano
Mr. Chris Le
Biology office

Office Phone

333-5769
219-3215
333-5219
333-5219
333-5759

Office

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BC 2082
BC 2025
BC 2025
BC 2035

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GROUP A Biology 1040 Lab Schedule – Fall 2020

<u>Week 1 - Introduction, Syllabus, Safety Guidelines</u>	
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
<u>Week 2 & 3 - Biological Macromolecules</u>	
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	
<u>Week 4 & 5 - Osmosis</u>	
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
<u>Week 6 & 7 - DNA/Genetics</u>	
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
<u>Week 8 & 9- Senses lab</u>	
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
<u>Week 10 & 11 - Metabolism and Photosynthesis labs</u>	
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
<u>Week 12 & 13 - Cardiovascular labs</u>	
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

<u>Week 1 - Introduction, Syllabus, Safety Guidelines</u>	
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
<u>Week 2 & 3 - Biological Macromolecules</u>	
August 24 - 28	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
Aug. 31 - Sept 4	IN-PERSON LAB - Biological Macromolecules
NO LABS THE WEEK OF SEPT. 7 - 11 DUE TO LABOR DAY HOLIDAY	
<u>Week 4 & 5 - Osmosis</u>	
Sept. 14 - 18	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
Sept. 21 - 25	IN-PERSON LAB - Osmosis Lab
<u>Week 6 & 7 - DNA/Genetics</u>	
Sept. 28 - Oct. 2	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
Oct. 5 - 9	IN-PERSON LAB - DNA Isolation and Gel Electrophoresis
<u>Week 8 & 9- Senses lab</u>	
Oct. 12 - 16	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
Oct. 19 - 23	IN-PERSON LAB - Senses Lab
<u>Week 10 & 11 - Metabolism and Photosynthesis labs</u>	
Oct. 26 - 30	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
Nov. 2 - 6	IN-PERSON LAB - Metabolism Lab
<u>Week 12 & 13 - Cardiovascular labs</u>	
Nov. 9 - 13	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
Nov. 16 - 20	IN-PERSON LAB - Cardiovascular Lab