

Biology 1040 Organismal Biology Lab
Spring Semester 2022
Biology Department, College of Arts and Sciences
Valdosta State University

Instructor: Mr. Christian B. Burch

Office: Science Building 2082

Office Hours: Thursday 1:00pm -2:00pm

Phone: Biology Dept. Main Office 333-5759

E-mail: cbburch@valdosta.edu

Room: Science Building 1046

Midterm (withdrawal deadline): March 10, 2022. 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:

Lab Manual (MANDATORY): Biology 1040L Organismal Biology Lab by Teresa H. Doscher. It can be purchased at the VSU Bookstore. It is a loose leaf, 3 hole punched manual so you will need to put it in a small 3 ring binder along with some extra loose leaf paper for taking notes.

This class will also use the following text. The text is available free online in a variety of formats and a print version or mobile app are available to purchase. This text is not mandatory but will be helpful and it is free.

Textbook: Concepts of Biology from OpenStax College, ISBN 1-938168-11-9, <https://openstaxcollege.org/textbooks/concepts-of-biology>

Attendance: Attendance in lab is mandatory. **If you do not attend your regular lab section, you must arrange to make-up the lab before the end of the week. This must be in the week the lab is scheduled. 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. (3 missed labs) If you are 10 minutes late to lab, you will be turned away from the lab. It will be your responsibility to contact me after class to arrange your attendance in another lab.**

Lab Make-up Policy: The privilege of making up a lab is not guaranteed. A lab exercise **MAY ONLY BE MADE UP DURING THE WEEK IT IS SCHEDULED.** Students with lab scheduled late in the week must be especially cautious since the number of subsequent labs for the week may be few. Prior to attending another lab, **the student is responsible for obtaining written permission from BOTH his/her instructor and the other lab instructor. It is possible that the other instructor's lab is full and you will not be able to attend that lab.** If this procedure is not followed, the student will be turned away from the other lab. The student should remind the other lab instructor to give a note to his/her instructor verifying the student's attendance. The instructor will determine validity of excuses. **ONLY ONE (1) MAKE UP WILL BE ALLOWED PER SEMESTER.**

Grading: Your final grade will be determined by laboratory quizzes, laboratory reports, homework assignments and daily participation grades. You will be told at the end of each lab what you will be responsible for the next lab period; whether it be a quiz or homework to turn in. **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.**

MAKE UP QUIZZES ARE NOT GIVEN SO DON'T ASK.

The lowest quiz or assignment grade will be dropped when calculating the student's final grade. 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. 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:

90 – 100% = A 80 – 89.99% = B 70– 79.99% = C 60 – 69.99% = D Below 60% = F

COVID, FACE COVERINGS AND SOCIAL DISTANCING

Blazers protect Blazers. As members of a community, we seek to protect others and ourselves. The first line of protection against COVID 19 is to be fully vaccinated, including a booster. Vaccinations are strongly encouraged and are available free of charge through VSU Health Services and many local pharmacies. Information about scheduling an appointment at Student Health Services is available at <https://www.valdosta.edu/administration/student-affairs/student-health/>.

To protect yourself and others, properly wearing a face covering is strongly encouraged in all classrooms and other instructional spaces at all times.

If you are experiencing COVID symptoms, use the free testing available at the Student Health Center; you may also obtain a test at many other locations around town. If you test positive, please report your case using the COVID Self Reporting tool at the top of your MyVSU page. Guidance on student absences is available at <https://www.valdosta.edu/academics/academic-affairs/guidance-on-student-absences.php>. To report an absence to the Dean of Students Office, complete the form at <https://www.valdosta.edu/administration/student-affairs/absentee-notification-form.php>.

If you must self-isolate or quarantine, follow the directions provided by Student Health after you have reported your COVID status.

GEORGIA DEPARTMENT OF HEALTH GUIDANCE ON ISOLATION AND QUARANTINE:

Isolation: If you test positive for COVID-19, everyone (regardless of vaccination status) must:

- Isolate at home for 5 days from the date symptoms first appeared or, if asymptomatic, the date of the positive test. Stay away from others in the household as much as possible during isolation.
- After 5 days, if you have no symptoms or your symptoms are resolving and you have not had fever for more than 24 hours without the use of fever-reducing medication, you may end isolation. If symptoms are not improving or fever has not resolved, you should continue isolating until these criteria are met.
- After ending isolation, you should continue to wear a mask around others for 5 days.

Quarantine: If you have been exposed to someone with COVID-19 and you are

- Boosted, or have become fully vaccinated within the last 6 months (Moderna or Pfizer vaccine) or within the last 2 months (J&J vaccine):
 - You do not need to quarantine at home.
 - You should wear a mask around others for 10 days.
 - If possible, get tested on day 5.
 - If you develop symptoms, get tested and isolate at home until test results are received, then proceed in accordance with the test results.
- Unvaccinated, or became fully vaccinated more than 6 months ago (Moderna or Pfizer vaccine) or more than 2 months ago (J&J vaccine) and have not received a booster:
 - You must quarantine at home for 5 days. After that, continue to wear a mask around others for 5 additional days.
 - If possible, get tested on day 5.
 - If you develop symptoms, get tested and isolate at home until test results are received, then proceed in accordance with the test results.

ALL GUIDANCE LISTED HERE IS SUBJECT TO CHANGE BASED ON RECOMMENDATIONS FROM THE GEORGIA DEPARTMENT OF PUBLIC HEALTH. VSU RESERVES THE RIGHT TO ADJUST PLANS AS NECESSARY.

For the student, we advise that you should also email your professors to inquire about course work, staying on track, and making up missed assignments/exams. Given that much of the course material and lectures are available online at this time, students should progress in their coursework unless they are physically unable to do so or the nature of their absence does not permit them do so. Students are also advised this is not an excused absence from class; rather it is the professor's right to determine the impact of the absence following the absence guidance offered in the syllabus. If students frequently miss class without good reason then later have a reason for absence notification to take place, their prior lack of participation in the course may negatively impact the available excused absences a professor may offer. Lastly, students are not required to let their

professors know why they are absent so long as an absentee notification has been sent on their behalf from Student Affairs. If your absence is COVID-related, be sure you have completed the Self Report Form in the MyVSU portal and talked with Student Health Services. Student Health is providing Student Affairs with all student absence information related to COVID. As the Blazer Creed articulates, members of the VSU community are expected to live by the high standards of civility, integrity, and citizenship and embrace their responsibility as a member of the Blazer community. In recognition of this responsibility, and in response to the best available science and current guidance from the Centers for Disease Control and Prevention and the Georgia Department of Public Health, while face coverings are no longer required, individuals are strongly encouraged to continue wearing a face covering indoors. Unvaccinated individuals are strongly encouraged to get vaccinated. Vaccines remain available at no cost for all members of the university community by appointment at Student Health Services. For COVID Vaccines, please call ahead for an appointment at 229-333-5886.

If you suspect you are positive for COVID you can get tested for FREE at the Student Health Center. If you are told to quarantine due to COVID, I will try to work with you the best I can, BUT you will have to do your part to COMMUNICATE with me, study on your own and complete assignments during your quarantine. This is not a free pass to miss class. You are still responsible for learning the material covered in the course during your absence.

Make sure you report to the Dean of Students so they can send out a notification to your professors. Lectures/labs will not be recorded but the powerpoints will be made available to you upon request. It will be up to you to study the powerpoints and read the text to prepare for quizzes and complete any assignments if applicable. You have a drop grade so if you miss lab one week due to quarantine and cannot make it up before the lab is broken down then the drop grade will apply to your missed assignment. Students who are quarantined will be dealt with on an individual basis so it is very important to communicate with your instructor to make up your missed assignments and make sure you don't get behind.

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).

Biology 1040 Lab Schedule – Spring 2022

*This is a tentative schedule subject to change at the instructors discretion.

Week	Date	Lab Exercise	Pages
1	Jan. 10 - 13	No labs this week	
2	Jan. 17 - 20	Syllabi / Laboratory Safety Guidelines / Laboratory Expectations	
3	Jan. 24 - 27	Exercise 1: Biological Macromolecules	1 - 6
4	Jan. 31 - Feb. 3	Exercise 2: Osmosis and Diffusion	7 - 16
5	Feb. 7 - 10	Exercise 3: Photosynthesis	17 - 20
6	Feb. 14 - 17	Exercise 4: Plant Physiology (begin experiment)	21 - 22
7	Feb. 21 - 24	Exercise 5: Deoxyribonucleic Acid Isolation and Gel Electrophoresis Exercise 4: Plant Physiology (record data)	27 - 30 21 - 22
8	Feb. 28 - March 3	Exercise 5: Deoxyribonucleic Acid Isolation and Gel Electrophoresis <i>continued</i> Exercise 4: Plant Physiology (record data)	27 - 30 21 - 22
9	March 7 - 10	Exercise 4: Plant Physiology (finish experiment)	21 - 22
10	March 14 - 28	Spring Break - No labs this week	
11	March 21 - 24	Exercise 6: Senses	31 - 36
12	March 28 - 31	Exercise 7 - Metabolism and Fermentation	37 - 42
13	April 4 - 7	Exercise 8: Microscopy	43 - 46
14	April 11 - 14	Exercise 10: Circulatory System - part 1	55 - 57
15	April 18 - 21	Exercise 10: Circulatory System - part 2	58 - 60
16	April 25 - 28	Exercise 10: Circulatory System - part 3	61 - 63

**Bio 1040 Organismal Lab
Spring 2022
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 E Burch 10 - 11:50		
10:30 AM					
11:00 AM					
11:30 AM					
12:00 PM			Bio 1040 Lab F Burch 12 - 1:50		
12:30 PM					
1:00 PM					
1:30 PM					
2:00 PM		Bio 1040 Lab C Castellano 2 - 3:50	Bio 1040 Lab G Doscher 2 - 3:50	Bio 1040 Lab S Burch 2 - 3:50	
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM		Bio 1040 Lab D Castellano 4 - 5:50	Bio 1040 Lab H Castellano 4 - 5:50	Lab meeting	
4:30 PM				Lab meeting	
5:00 PM				Lab meeting	
5:30 PM				Lab meeting	

<u>Faculty</u>	<u>Office Phone #</u>	<u>Office #</u>	<u>Email</u>
Dr. Teresa Doscher	333-5769	BC 1098	thdosche@valdosta.edu
Mr. Christian Burch	219-3215	BC 2082	cbburch@valdosta.edu
Mr. Damion Castellano	333-5219	BC 2025	dacastellano@valdosta.edu
Biology office	333-5759	BC 2035	