

**BIOZ 152 - Introduction to Biological
Science II Laboratory, 1 credit
LAB SCHEDULE – Spring 2017
Virginia Commonwealth University**

Instructor

e-mail:

office hours:

Prerequisites/ Co-requisites: In order to be enrolled in BIOZ 152 you must also be currently enrolled in BIOL 152 or have taken BIOL 152 previously and passed with a grade of “C” or better.

Reading Requirements:

Textbooks (Required):

- A Student Handbook for Writing in the Biological Sciences by Karin Knisely (4th edition, Sinauer and Freeman Publishers, 2014)
- Introduction to Biological Science Laboratory II Workbook available in the Barnes and Noble VCU Bookstore. You must have the new and unused edition for this class.
- Simutext Evidence of Evolution, Darwinian Snails, and Isle Royale available at the VCU Barnes and Noble Bookstore.

Scientific articles:

Throughout the semester you will be assigned all or part of selected scientific articles to read. These will be made available in PDF form on the course Bb page.

Other Requirements:

You must have chemical safety goggles and a lab coat for this course.

Course Overview:

We will focus on developing skills for experimental design, data analysis, as well as both written and oral communication in the sciences. This course will also provide hands on experience in a laboratory setting covering key concepts within the biological sciences. This course is 1 credit.

Course Objectives (what you should be able to do by the end of the semester):

- Describe and compare the diversity of life.
- Discuss evolution as the core theme of biology.
- Search databases (online and print) for peer reviewed articles and select literature that is relevant to an experiment
- Demonstrate basic methods for collecting, graphing and analyzing data and observations
- Write the basic components of a research paper, including the introduction, methods, results and discussion sections
- Present experimental results in both written and oral formats

Attendance:

Attendance is mandatory. **No credit will be given in the event of an unexcused absence** for the respective quiz/assignment of the day missed. Furthermore, the quiz/assignment based on the material missed will not be accepted. Only special circumstances, such as a death in the family or illness, will warrant the opportunity to make up work (in which case you will receive an Incomplete and must complete the assignment the next semester); verification of such circumstances will be required (e.g., an obituary notice or doctor's note). Tardiness is NOT acceptable. Arriving late will result in missed opportunities to take quizzes and/or to turn in assignments. **Missing three (3) or more laboratories will automatically result in a grade of “F.”** Leaving after a quiz or assignment submission without completing the lab exercise will result

in a 0 for the quiz and will count as an absence. Having another student sign the attendance sheet for you is a violation of the VCU Honor Code and will count as cheating.

WEEK	TOPIC	HOMEWORK	
1	Jan 17th – 20th	Lab Safety and Orientation Academic Integrity Module Introduction to SimBio	·Purchase Lab Manual ·Academic Integrity Module ·Download and register for SimBio ·Complete Exercise 1 in Evidence of Evolution
2	Jan 24th – 27th	SimBio: Evidence of Evolution **Bring your computer to class	·Complete "Graded Questions" in Evidence of Evolution ·Read Darwin's Finches Lab and complete the primary literature assignment
3	Jan 31st-Feb 3rd	Darwin's Finches	Write the Introduction and Methods for your paper, print out and bring to class for peer review
4	Feb 7th – 10th	Scientific Writing, Making Graphs and tables, Peer evaluation	*Lab Report- Darwin's Finches -Complete Sim Bio:Section 1 Snail Shells in the lab Darwinian Snails
5	Feb 14th – 17th	SimBio: Darwinian Snails **Bring your computer to class	·Post Lab: Complete sections 6 and Pre-lab for Evolving Organisms
6	Feb 21st – 24th	Evolving Organisms I and II	Read Evolving Org article and summarize Plant Resource Allocation Article Quiz
7	Feb 28th – Mar 3th	Plant Resource Allocation Lab	· Experimental Outline and setup Darwin's Finches Final paper
8	Mar 6th – 10th	SPRING BREAK	
9	Mar 14th – 17th	Plant Resource Allocation Pt2	· Fermentation article summary
10	Mar 21st – 24th	Fermentation	· Fermentation post lab summary, Evolution of Animals I Questions
11	Mar 28th – 31 st	Evolution of Animal Diversity I (dissections)	Study for practical quiz ·Pre lab Evol of Animals II quiz in Bb
12	Apr 4th – 7th	Evolution of Animal Diversity II (Dissections)	· Study for practical quiz ·Pre lab article summary
13	Apr 11th – 14th	Open and Closed Circulatory Systems	Open and Closed Circulatory Summary. Pre lab: Sim Bio Isle Royale: Section I, Moose Arrive
14	Apr 18th –21st	Sim Bio: Isle Royale	SimBio Part 6 Graded Questions ·Prepare Presentation of Project
15	Apr 25th – 28th	Student Presentations and Evaluations	

Note: The order and content of these labs are subject to change at the instructor's discretion.

BLACKBOARD

Blackboard is a web-based tool for students and instructors. Your grades will be posted on blackboard, which will allow you access to your grades any time via the web. The website address is blackboard.vcu.edu.

Grades and Policies

Letter grades are assigned using a 10-point scale (90–100% = A; 80–89% = B; 70–79% = C, etc.), using the following calculations:

Presentation: 7.5%

Lab Report Final paper : 7.5%

Lab assignments (80%): Each item counts equally

- o Pre-Lab Modules/Assignments
- o Data sheets
- o Class discussion participation
- o Experiment Summaries
- o Article Summaries
- o Other Assignments

Letter Grade	Point Value
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

Assignments: The majority (if not all) of the material covered on assignments and worksheets will come from the lab session(s) noted. It is important to read your lab manual in advance of the laboratory session. For worksheets, quizzes softchalk modules, peer evaluations, and all writing assignments you are expected to work **ON YOUR OWN**. Everything turned in for a grade must be in your own words. Any assignments that are unable to be evaluated by SafeAssign will not be graded.

Late work will not be accepted.

Extra Credit: There is no extra credit.

Honor Code: Violations of the VCU Honor Code (lying, stealing, cheating, plagiarism, etc.) will be reported. **All students must complete the Honor Code Module on Blackboard and score 10/10 before turning in any work for a grade.**

Non-dissection option: Dissections are a part of labs in BIOZ 152. Animals dissected in class include earthworm, frog, fish, crayfish and rat. One of each organism per lab table is typically dissected, so those students who do not want to dissect, are not required to do so. Additionally, to accommodate those students with strong religious or moral opposition to dissection, we offer a non-dissection alternative. Students requesting this alternative will need to submit a written request and set up a meeting with Emily Watkinson (LSCB room 218) immediately.

Non-dissection exercises for BIOZ 152 will include computer software, models, and diagrams for frog, fish, starfish, crayfish and fetal pig dissections. Computers are available in the lab classroom as well as in the student resource center. Students choosing the non-dissection option will be responsible for all quizzes and worksheets completed by regular students in addition to the worksheets specifically designed for the non-dissection students. Most of the computer programs require a greater time investment from the students than the actual dissection. Students choosing this option are responsible for completing both the regular class work, and the dissection alternative work within the same lab week as regular students (the student resource center is available for extra time with the computer software). All students dissection and non-dissection, will take the same quiz.

VCU Email Policy

Email is considered an official method for communication at VCU because it delivers information in a convenient, timely, cost-effective, and environmentally aware manner. Students are expected to check their official VCU email on a frequent and consistent basis in order to remain informed of university-related communications. The university recommends checking email daily. Students are responsible for the consequences of not reading, in a timely fashion, university-related communications sent to their official VCU student email account. This policy ensures that all students have access to this important form of communication. It ensures students can be reached through a standardized channel by faculty and other staff of the university as needed. Mail sent to the VCU email address may include notification of university-related actions, including disciplinary action. Please read the policy in its entirety: <http://www.ts.vcu.edu/kb/3407.html>.

VCU Honor System: Upholding Academic Integrity

The VCU Honor System policy describes the responsibilities of students, faculty and administration in upholding academic integrity, while at the same time respecting the rights of individuals to the due process offered by administrative hearings and appeals. According to this policy, "Members of the academic community are required to conduct themselves in accordance with the highest standards of academic honesty and integrity." In addition, "All members of the VCU community are presumed to have an understanding of the VCU Honor System and are required to:

- Agree to be bound by the Honor System policy and its procedures;
- Report suspicion or knowledge of possible violations of the Honor System;
- Support an environment that reflects a commitment to academic integrity;
- Answer truthfully when called upon to do so regarding Honor System cases;
- Maintain confidentiality regarding specific information in Honor System cases."

More information can be found at in the VCU policy library at <http://www.assurance.vcu.edu/Policy%20Library/Honor%20System.pdf>.

In this class, because coursework will be collaborative at times, particular issues of integrity arise. You should not copy or print another student's work without permission. Any material (this includes IDEAS and LANGUAGE) from another source must be credited, whether that material is quoted directly, summarized, or paraphrased. In other words, students should respect the work of others and in no way present it as their own.

Student Conduct in the Classroom

According to the Faculty Guide to Student Conduct in Instructional Settings (<http://www.assurance.vcu.edu/Policy%20Library/Faculty%20Guide%20to%20Student%20Conduct%20in%20Instructional%20Settings.pdf>), "The university is a community of learners. Students, as well as faculty, have a responsibility for creating and maintaining an environment that supports effective instruction. In order for faculty members (including graduate teaching assistants) to provide and students to receive effective instruction in classrooms, laboratories, studios, online courses, and other learning areas, the university expects students to conduct themselves in an orderly and cooperative manner." Among other things, cell phones and beepers should

be turned off while in the classroom. The Student Code of Conduct also prohibits the possession of or carrying of any weapon. For more information see <http://register.dls.virginia.gov/details.aspx?id=3436>.

Certainly the expectation in this course is that students will attend class with punctuality, proper decorum, required course material, and studious involvement. The *VCU Resource Guide* contains additional important information about a number of other policies with which students should be familiar, including Guidelines on Prohibition of Sexual Harassment, Grade Review Procedure, and Ethics Policy on Computing. It also contains maps, phone numbers, and information about resources available to VCU students. The *VCU Resource Guide* is available online at the link above or through the Division of Student Affairs.

Students with Disabilities

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, as amended, require that VCU provide "academic adjustments" or "reasonable accommodations" to any student who has a physical or mental impairment that substantially limits a major life activity. To receive accommodations, students must request them by contacting the Disability Support Services Office on the Monroe Park Campus (828-2253) or the Division for Academic Success on the MCV campus (828-9782). Please also visit the Disability Support Services website at www.students.vcu.edu/dss and/or the Division for Academic Success website at healthsciences.vcu.edu/DAS/ for additional information.

Any student who has a disability that requires an accommodation should schedule a meeting with the instructor at the student's earliest convenience. Additionally, if coursework requires the student to work in a lab environment, the student should advise the instructor or a department chairperson of any concerns that the student may have regarding safety issues related to a disability. Students should follow this procedure for all courses in the academic semester.

Statement on Military Short-Term Training or Deployment

If military students receive orders for short-term training or for deployment/mobilization, they should inform and present their orders to Military Student Services and to their professor(s). For further information on policies and procedures contact Military Services at 828-5993 or access the corresponding policies.

Excused Absences for Students Representing the University

Students who represent the university (athletes and others) do not choose their schedules. Student athletes are required to attend games and/or meets. All student athletes should provide their schedules to their instructors at the beginning of the semester. The Intercollegiate Athletic Council strongly encourages faculty to treat missed classes or exams (because of a scheduling conflict) as excused absences and urges faculty to work with the students to make up the work or exam.

Campus Emergency information

What to Know and Do to Be Prepared for Emergencies at VCU:

- Sign up to receive VCU text messaging alerts. Keep your information up-to-date. Within the classroom, the professor will keep his or her phone on to receive any emergency transmissions.
- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- Listen for and follow instructions from VCU or other designated authorities. Within the classroom, follow your professor's instructions.
- Know where to go for additional emergency information.
- Know the emergency phone number for the VCU Police (828-1234).
- Report suspicious activities and objects.
- Keep your permanent address and emergency contact information current in eServices.

Important Dates

You can view important dates for the Spring 2017 semester in the university calendar.

http://academicalendar.vcu.edu/ac_fullViewAll.asp?term=Spring+2017

First week of Lab: January 17th-20th, 2017

Add/Drop Period: January 17th-23rd, 2017

Notification of intent to Observe Religious Holiday: Friday, January 27th, 2017

Last day to withdraw: Friday, March 24th, 2017

VCU Mobile

The VCU Mobile application is a valuable tool to get the latest VCU information on the go. The application contains helpful information including the VCU directory, events, course schedules, campus maps, athletics and general VCU news, emergency information, library resources, Blackboard and more. To download the application on your smart phone or for more information, please visit <http://m.vcu.edu>.

Class Registration Required for Attendance

Students may attend only those classes for which they have registered. Faculty may not add students to class rosters or Blackboard. Therefore, if students are attending a class for which they have not registered, they must stop attending.

Withdrawal from Classes

Before withdrawing from classes, students should consult their instructor as well as other appropriate university offices. Withdrawing from classes may negatively impact a student's financial aid award and his or her semester charges. To discuss financial aid and the student bill, visit the Student Services Center at 1015 Floyd Avenue (Harris Hall) and/or contact your financial aid counselor regarding the impact on your financial aid. Contact information for the University Financial Aid Office is available at <http://www.enrollment.vcu.edu/finaid/contact-us/>.

Last day to withdraw is Friday, March 24th, 2017

Student Financial Responsibility

Students assume the responsibility of full payment of tuition and fees generated from their registration and all charges for housing and dining services, and other applicable miscellaneous charges. Students are ultimately responsible for any unpaid balance on their account as a result of the University Financial Aid Office or their third party sponsor canceling or reducing their award(s).

Mandatory responsibility of faculty members to report incidents of sexual misconduct

It is important for students to know that all faculty members are mandated reporters of any incidents of sexual misconduct/violence (e.g., sexual assault, sexual exploitation and partner or relationship violence). This means that faculty cannot keep information about sexual misconduct/violence confidential if you share that information with them and they must report this information immediately to the university's Title IX Coordinator. In addition, department chairs, deans, and other unit administrators are required to report incidents of sex or gender-based discrimination to the university's Title IX Coordinator.

Confidential reporting sources include staff in Sexual Assault and Domestic Violence at the Wellness Resource Center, University Counseling Services and University Student Health Services. The Policy on Sexual Misconduct/Violence and Sex/Gender Discrimination - Interim, can be found at <http://www.policy.vcu.edu/sites/default/files/Sexual%20Misconduct%20Violence%20and%20Sex%20Gender%20Discrimination.pdf>.