



BIOLOGICAL SCIENCES I LABORATORY (BISC 161)

Course Overview

BISC 161 is a fully online course in which you will learn about the basic concepts in Biological Sciences at the molecular, cellular and population levels, including energy transfer and use, genetics and evolution and the structure and functions of cells. You will experience the course as an online student, taking part in the virtual laboratories, completing hand-ins and quizzes.

Prerequisites: minimum ACT mathematics score of 25 (SAT 590) or completion of MATH 123, MATH 125 or CHEM 101 with a grade of A or B.

Department policy for majors: The BISC 160 course is a co-requisite of this class. You cannot drop the lab without also being dropped from the lecture. The Department of Biology requires a final grade of a C or better in all Biology Courses used to satisfy requirements for your degree.

Lab Coordinator

Mrs. Nicole Lewis

Lecturer and lab coordinator, Department of Biology

Phone: (662) 915-1648

Email: bisc161@olemiss.edu

Office: 309 Shoemaker Hall

Course Description

This is a foundation class that prepares students with the skills necessary for advanced courses in biological sciences and related subjects.

Course Learning Objectives

After completing this course, the participant will be able to:

1. Explain and implement the scientific method.
2. Describe the structure and function of biological molecules.
3. Explain the pathways that cells use to harvest chemical energy.
4. Explain how living things use genes to generate proteins and transmit information across generations.
5. Describe the process of biological evolution.

Methods of Instruction

Instructional methods used in this course include using virtual labs, on the lab portal. Each lab requires that you complete the virtual lab, a hand-in and a quiz.

Course Expectations

Students are expected to log into the lab portal every week to complete all assignments for the lab at hand. Use the syllabus for content covered and due dates for all assignments.

Time management

It is your responsibility to complete all assignments in a timely manner. Each week, a lab will open, and you will complete the hand-in and quiz. Labs will open on Mondays at 8am CENTRAL time and close on Fridays, the same week, at 5pm CENTRAL time. Because this course is taught remotely, and asynchronously, you do not have to log into the lab portal at a specific time each week, however, please do not wait until the last minute to complete assignments.

Assignment Submissions

All assignments will be uploaded to the lab portal. All assignments have ONE ATTEMPT and quizzes have a time limit.

Course Requirements

Required Materials

Laboratory Portal/Virtual Labs

You are required to register for the lab portal. The link for the lab portal can be found on [Blackboard](#).

Technology

INTERNET ACCESS

You must have access to the Internet, preferably high-speed Internet, for the duration of this course.

- *SOFTWARE*

You must have access to a computer with the following software installed:

- Microsoft Office or some sort of word processing program - You must have consistent access to a professional word processor and a presentation program.
- Microsoft Excel or some sort of spreadsheet program

- *BROWSERS, PLUG-INS, PLAYERS AND VIEWERS*

In order to take full advantage of all the features in this course, be sure you have the right technology at your fingertips. This includes:

- A [Blackboard-supported browser](#) – **Firefox** is preferred on all computers
- [Acrobat Reader](#)

Run [Blackboard Browser Checker](#) to verify browser and installed technologies on your computer.

- *HARDWARE*

- Computer Speakers or headsets

Tech support

The [IT Helpdesk](#), centrally located in Weir Hall, is open Monday through Friday, 8 a.m. to 5 p.m. The helpdesk offers assistance to students and employees with technology-related issues involving software, hardware and networking. It provides support for email, Wi-Fi, Microsoft Office and other campus-wide applications. Come by Weir Hall or call us at 662-915-5222. Email the [UM helpdesk](#) or visit their [website](#) for more information.

For issues with the Laboratory Portal, contact [Hayden McNeil support](#).

Course Policies

Attendance Policy

The University's Class Attendance Policy enables the instructor to determine the attendance guidelines that best promote learning in the delivery mode of the course. The instructor articulates and informs students of that policy in writing, via a course syllabus, on or before the first meeting of each course. Fall 2020 courses will be delivered in face-to-face, hybrid, **remote**, and online delivery modes. This course will be taught remotely and asynchronously. Students attending the virtual component of hybrid, remote, or online courses are subject to the same attendance policy and procedures as traditional students. However, participation is defined in a different manner. The University's "Attendance Policy for Online Education" states: "Student attendance in online courses is defined as active participation in the course as described in the individual course syllabus." If students fail to meet online attendance requirements as stated in the syllabus, they will be given an absence. COVID-19 safety protocols hold the highest priority, and faculty should design attendance guidelines for students which do not penalize students for adhering to COVID-19 safety protocols. Course attendance policy for face-to-face, hybrid, remote and online must allow for absences necessary for isolation, quarantine, or other COVID-19 related absences. Faculty are encouraged to be flexible with assignment due dates when students have COVID-19 related absences in all courses, regardless of delivery mode. For this course, assignments will open every week at 8am Monday and close that same week, Friday at 5pm. All assignment due dates are in CENTRAL time. Please adjust your time accordingly. **Per University policy, if you do not submit your first lab during the first two weeks of class, you will be dropped from our class and the co-requisite BISC 160.** Only students with a valid excuse (serious illness, family emergency or approved University function) will be **considered** for a possible make-up. Make-up labs will **ONLY** be granted for excused absences **with dated documentation** (doctor's notes, University paperwork, funeral programs, etc.) If you miss a lab/assignment for any reason, you must contact Mrs. Lewis at the [BISC161 email](#).

Calendar Changes

Fall semester classes begin 24 August 2020 and end 17 November 2020. Final exams will be held 18-20 and 23-24 November, however, there is no final exam for this course.

Communication Policy

Email is the preferred method of contact as most teaching assistants (TA) and the lab coordinator are working remotely. When sending an email, you must send the email to either your TA or bisc161@olemiss.edu

All emails must contain the following information:

1. Your name
2. Your lab section
3. Your specific request
4. If necessary, a copy of your valid, dated excuse (scan, photo, etc.).

Here is an example of how this would look:

Dear Mrs. Lewis,

My name is John Jackson and I am in section 17 of BISC 161. I missed lab # 4 because I have the flu. Attached is an image of the excuse I got from the health center. May I please make up the lab next week? Thank you!

Sincerely,

John Jackson, Sect 17

Grading

- Grades will be posted on the lab portal weekly.

Your lab grade is composed of only hand-ins and quizzes. See schedule below for due dates and point values.

Categories	Points	Example Calculation
Hand-ins (12)	173	150
Quizzes (12)	157	122
Total	330	272

Grading Scale (This course is not graded on a +/- scale)

A = 89.5 – 100%

B = 79.5 – 89.4%

C = 69.5 – 79.4%

D = 59.5 – 69.4%

F = Below 59.5%

Calculating your grade (example): $272/330 = 0.824$; Then: $0.824 \times 100 = 82\% = B$

University of Mississippi Policies

Academic integrity

The University of Mississippi is dedicated to supporting and sustaining a safe and scholarly community of learning dedicated to nurturing excellence inside and outside of the classroom. Each student has a duty to become familiar with University values and standards reflected in University policies, and each student has a duty to honor University values and standards reflected in University policies. These policies are outlined in the [M Book](#). For a complete listing of policies, please visit the University Policy Directory.

Copyright Notice

Materials used in connection with this course may be subject to copyright protection under Title 17 of the United States Code. Under certain Fair Use circumstances specified by law, copies may be made for private study, scholarship, or research. Electronic copies should not be shared with unauthorized users. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability as well as disciplinary action under University policies.

Disability Access and Inclusion

The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, time limits, difficulty with the acquisition of lecture content, inaccessible web content or the use of non-captioned or non-transcribed video and audio files. Students must also contact Student Disability Services at 662-915-7128 or sds.olemiss.edu so that office can 1) explore if barrier removal is necessary; 2) provide you, if approved, with Instructor Notification forms; 3) facilitate the removal of curricular barriers; and 4) ensure you have equal access to the same opportunities for success that are available to all students.

Health Requirements

Students and faculty must quarantine for 14 days if they have a positive COVID-19 test, possible virus exposure, or display any symptoms related to COVID-19. Students with COVID-19 should seek medical attention at the Student Health Center (if living on or near campus) and contact their instructor to let them know that they are sick, quarantined, or have some other health-related absence. If students test positive for COVID-19 at ANY health care facility, they must contact the Student Health Center at 662-915-7274. (Faculty and staff should contact the Employees Health Services at 662-915-6550). University Health Services will coordinate contact tracing to lessen the likelihood of spread.

IT Appropriate Use Policy

This policy sets forth the privileges of and restrictions on students, faculty, staff, and other users with respect to the computing and telecommunications systems offered by the University of Mississippi (UM). This policy is designed to protect the University community from illegal or damaging actions by individuals, either knowingly or unknowingly. Inappropriate use exposes the University to risks, including virus attacks, compromise of network systems and services, and legal issues. This policy directly

addresses copyright issues related to illegal downloads and peer-to-peer file sharing. For Appropriate Use Policy questions, send an email to aup@olemiss.edu.

Student Identity Policy

Federal regulations, our accrediting agency (SACS) and university policies require that safeguards are used to ensure that the student who receives the academic course credit is actually the person doing the work. You will need to present your student ID before taking proctored exams and your instructor may verify your identity through live or virtual meetings, or by using an identity verification program.

Student Privacy Policy

The University of Mississippi protects the privacy of all students, including online and distance learning students, through adherence to the Family Educational Rights and Privacy Act of 1974 (FERPA) through compliance with other institutional policies and procedures governing the management and security of protected information of faculty, staff, and students, and by outlining the expectations of privacy for the university community as regards to electronic information. [Student Privacy Policy](#)

Student Support Service

Students are encouraged to visit the [University's Keep Learning](#) site to access information and resources related to COVID-19 support. The site provides links to the University student services to facilitate and support learning. Students with diagnosed health concerns that may affect their compliance with COVID-19 health requirements should contact UM's [Student Disability Services](#) (SDS) Office to see if they are eligible for an SDS accommodation as soon as possible.

Updated Contact Information

The University must have accurate contact information, including cell phone numbers, to facilitate student communications and contact tracing. Students should check and update their [University contact information](#).

Verification of Student Attendance Policy

The University must abide by federal guidelines to verify the participation of online students. For all course types, including thesis, internships, labs, online courses, etc., the instructor must verify your participation based on some type of participation. This may include submission of an online assignment or other course related contact with the instructor. (However, simply logging into Blackboard will not count as an academically related activity.) [Attendance Policy for Online Education](#)

Course Outline

Module	Topics/Materials	Assignments	Start Date	Due Date
1	Scientific Method	HI 1 (20 pts); Q1 (10 pts)	Monday, 24 Aug, 8am	Friday, 28 Aug, 5pm
2	Cell Structure and Function	HI 2 (12 pts); Q2 (16 pts)	Monday, 31 Aug, 8am	Friday, 4 Sept, 5pm
3	Diffusion and Osmosis	HI 3 (20 pts); Q3 (20 pts)	Monday, 7 Sept, 8am	Friday, 11 Sept, 5pm
4	Quantitative Analysis of Enzyme Activity	HI 4 (20 pts); Q4 (10 pts)	Monday, 14 Sept, 8am	Friday, 18 Sept, 5pm
5	Cellular Respiration	HI 5 (10 pts); Q5 (8 pts)	Monday, 21 Sept, 8am	Friday, 25 Sept, 5pm
6	Photosynthesis	HI 6 (16 pts); Q6 (24 pts)	Monday, 28 Sept, 8am	Friday, 2 Oct, 5pm
7	DNA	HI 7 (12 pts); Q7 (9 pts)	Monday, 5 Oct, 8am	Friday, 9 Oct, 5pm
8	PCR	HI 8 (12 pts); Q8 (7 pts)	Monday, 12 Oct, 8am	Friday, 16 Oct, 5pm
9	Mitosis and Meiosis	HI 9 (15 pts); Q9 (15 pts)	Monday, 19 Oct, 8am	Friday, 23 Oct, 5pm
10	Human and Mendelian Genetics	HI 10 (12 pts); Q10 (10 pts)	Monday, 26 Oct, 8am	Friday, 30 Oct, 5pm
11	Genetics	HI 11 (15 pts); Q11 (15 pts)	Monday, 2 Nov, 8am	Friday, 6 Nov, 5pm
12	Ecology	HI 12 (9 pts); Q12 (13 pts)	Monday, 9 Nov, 8am	Friday, 13 Nov, 5pm

Note: HI = Hand-in; Q = Quiz

All Start dates and due dates are in Central Standard Time (CST)

All assignments have only ONE ATTEMPT, and all quizzes have a time limit.