

**BIOLOGICAL SCIENCE LAB
BSC 1005L**



FLORIDA A&M UNIVERSITY
**BIOLOGICAL
SCIENCES**
COLLEGE OF SCIENCE AND TECHNOLOGY

Instructor: Dr. Eriola Betiku (Contact Information)

Course: BSC 1005L Biological Science Lab (L07)

FAMU Office: Rm. 509 Jones Hall

Credit: One (1) semester hour

Office Hours: Fri 11 AM – 1PM or By ZOOM or F2F appointment

Lecture Meeting: Wed 10:0AM – 11:40AM

FAMU Office Phone: (850) 412-5058

Location: Room 312 (Jones Hall)

E-Mail: eriola.betiku@famu.edu

Course description and objectives

This survey laboratory is designed to expose biology non-majors to basic principles of biology through experiments and other procedures to reinforce material that has been or will be covered in the associated lecture. Develop an understanding of the process of science. Develop an understanding of the basic unit of life, its complexity and diversity. Develop an understanding of the basic principles of heredity and how they relate to inheritance of traits in humans. Develop an appreciation of the organization of living organisms.

Student Learning Outcomes: A student who successfully completes this course will be able to:

- Define or describe the general terms, structures and concepts associated with each of the major topics discussed.
- This outcome will be assessed by examinations in the laboratory.
- Demonstrate oral and written communication skills.
- This outcome will be assessed by examinations in lab, the scientific paper (lab report), and one oral presentation.
- Be able to analyze and interpret data, and critically interpret scientific information.

Required Texts, Readings, and/or Other Resources

1. **Textbook:** BSC 1010 Laboratory Manual by Biology Faculty, Burgess Publishing Co., 1995 available at FAMU bookstore.
2. **ADDITIONAL LAB RESOURCES:** YouTube /Jove Videos.
3. **LAB NOTEBOOK:** BRING YOUR LAB MANUAL TO EVERY LAB SESSION, YOU WILL NOT BE ALLOWED TO SHARE LAB MANUAL WITH ANYONE IN THE LAB!

Course technologies:

- Canvas Learning Management System (LMS) will be used to deliver instructional resources
- Students are required to have access to a functioning personal computer (PC) with working camera and with a reliable Internet connection to complete assigned work & quizzes.

Please be advised, *Chromebooks are not compatible with the technology required for this course.*

- Please ensure to download the **FAMU Respondus Lockdown Browser** @ (<http://www.famu.edu/index.cfm?online&Respondus>). *If you have downloaded Respondus from a previous institution it may not be compatible with the Exams administered in this course.*

Teaching Strategies

This course is designed to give students a transformational and applied learning experience of microbiological techniques. To achieve this goal, it requires effective partnership and commitment from both I (the instructor) and you (the student). This course will be delivered via traditional classroom forum through Canvas Learning Management Systems (LMS). Course materials and other digital resources for this course can be accessed through links within the Canvas shell.

BSC1010 L - LAB SCHEDULE* (Starting Date: August 22nd, 2022). *No class

WEEK	LAB TOPIC	Lab Manual Reading
August 24	Lab Ethics /Quantification /Representation of Data/Safety	Chapter 1
August 31	Microscope and Cell	Chapter 2,3
September 7	(HOLIDAY* LABOR DAY)	*No class
September 14	Chemistry of Life	Chapter 4
September 19	Exam 1	Study # 1,2,3,4
September 28	Cell Membrane	Chapter 5
October 5	Enzymes Lab	Chapter 6
October 12	Photosynthesis	Chapter 7
October 19	Exam 2 / Corn Planting	Study # 5,6,7
October 26	Mitosis & Meiosis	Chapters 8, 9
November 2	DNA RNA /Mendelian Genetics /	Chapters 11, 12, 13
November 9*	(Holiday) * Nov 11	*No class
November 16	Presentation: Chi-Square / (all lab reports due)	Chapter 13
November 23	THANKSGIVING HOLIDAY* / 23-25	*No class
November 30	Exam 3	Study # 8, 9,11,12,13
December 7	Last Day of Classes **	*No class

Grading/Evaluation

Three regular examinations will be given during the semester (Two regular examinations and a final examination). **Final examination is mandatory.** **All examinations carry equal weight.** *There is no makeup exam for this lab class.* At the end of the semester, the lower examination score between Exams 1 and 2 will be dropped, and the final exam score will be retained. Online

assignments, in class quizzes, attendance and class participation will count as part of the final grade. grade.

Grades: Your overall grade will be determined by the following activities.

S/N	ITEM	POINTS	GRADE
A.	Lab Exam 1	100	A: >90%
B.	Lab Exam 2	100	B: >80%
C.	Lab Final Exam	100	C: >70%
D.	Attendance, Quizzes, Class participation, and Lab book/report (Extra Points)	150	D: >60%
	Final = A or B + C + D	350 (= 100%)	F: ≤59%

Weekly Timeline

In this course, the week runs from Monday 8:00 am through Sunday 11:59 p.m. EST. All weekly assignments, including discussion activities, must be completed by Sunday 11:59 p.m. EST.

Attendance Policy

All labs are mandatory. There is a 10-points/per day penalty for each unexcused absence. Speak with your instructor if there is any cause for you to miss a class or an exam, follow this with an official excuse. These two jointly will be considered as an excused absence. You must arrive in class on time, remain the entire periods, and not be disruptive. Since this course is one (1) credit hour, you are allowed ONLY ONE (1) UNEXCUSED ABSENCE. If you miss 2 lab sessions or more, at the discretion of the instructor, you may be assigned an “F” grade for the course.

Late Assignments

Late assignments may be assessed a point loss of 25% for each 24-hour period they are late unless prior agreement has been made with the instructor for an alternate due date.

Official Excuse

Only an official university excuse WILL BE ACCEPTED. Speak with me if there is any cause for you to miss a lab session or an exam, follow this with official excuse. These two jointly will be considered as excused absent.

Other Lab Policies and Lab Safety: Cell Phones uses

- **LAB SAFETY:** Due to Covid _19 New Lab Safety Rules must be observed and followed <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html#:~:text=CDC does not recommend shield without mask.7/28/2020> The CDC has updated its guidance for fully vaccinated individuals based on new evidence on the Delta variant as follows: <https://www.flbog.edu/2021/08/06/state-university-system-of-florida-health-policies-for-the-2021-22-academic-year/> “ To maximize protection from the Delta variant and prevent possibly spreading it to others,

wear a mask indoors, in public if you are in an area of substantial or high transmission.”

- Cell phones should be **TURNED OFF** and **PUT AWAY** on **ENTERING** the lab. If a cell phone rings while class is in session, the student **WILL BE ASKED TO LEAVE THE LAB** and **BE MARKED ABSENT** for that day. Cell phones should **NOT** be used as a calculator in any scheduled exam.
- *All cell phones must be turned off during an exam. Cell phones are to be placed with the students' belongings prior to an exam. A ringing cell phone will result in a 20-point deduction from the student's exam.*
- Eating, drinking, and chewing gum are expressly forbidden and **ABSOLUTELY NOT** allowed in the laboratory. If you have water bottles, keep them in your bags; they cannot be sitting on the lab benches.
- Be prepared to work when you arrive at the laboratory. Familiarize yourself with the lab procedures before beginning the lab. For group work each student should interpret data and answer questions separately unless directed otherwise.
- Clothing should be appropriate for working in the lab. Ideally, dress for lab should include **A WHITE LAB COAT**, long pants, shoes which cover the entire foot and hair must be tied up. **ALL PARTS OF THE BODY SHOULD BE COVERED FOR SAFETY REASONS.**
- Do not taste, touch, or smell any reagents unless directed to do so by your teacher.
- Be careful when working with flammable and combustible materials which include but not limited to alcohol, ether, and acetone.

Dropping This Course

It is the student's responsibility to understand when they need to consider dropping a course. Refer to the FAMU Course Schedule for dates and deadlines for registration.

Incomplete Policy

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if supporting documentation is submitted and the student has a passing grade at the last attendance date.

Academic Honesty/Plagiarism

Florida A&M University expects its students to be honest in all their academic work. Every student **MUST** be committed to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. Failure to comply with this commitment may result in disciplinary action from the University.

Instructor Feedback

The best medium of communication is via **emails**. Kindly give 24 – 48 hours for response to your emails due to high traffic of mails and other official engagements. Every effort will be made to

provide feedback after submitting an assignment or taking a test. My Office hours represent a great communication and feedback forum as well as to address student concerns.

Technical/Learning Assistance

The FAMU Office of Instructional Technology (OIT) offers multimedia, distance learning, audiovisual, and video conferencing support to faculty, students, and staff at Florida A&M University. The FAMU ITS provides support for student services, including username and password creation/reset, email troubleshooting, iRattler, and mobile device configuration. For more information about these services, contact:

Office of Instructional Technology Office of Information Technology Services

Coleman Library University Commons, Room G126
Tallahassee, Florida 32307 Tallahassee, FL 32307
(850) 599-3460 (850) 599-3560
oit@famuedu.edu <http://www.its.famuedu.edu>

FAMU Counseling Services

Resources are available on-campus for students having personal problems or lacking clear career and academic goals which interfere with their academic performance. These resources include:

1. University Counseling Center, 101 Sunshine Manor (599-3145).
2. Student Mental Health, Personal counseling (599-3145).
3. Sexual Assault Recovery Service, call University Police (599-3256). Sexual assault counseling (599- 3145).
4. Career Resources Center, 118 Student Union Bldg. Career development assistance and counseling (599-3700).

American with Disabilities Act

Students with disabilities needing academic accommodation should (1) register with and provide documentation to the Center for Disability Access and Resources (CeDAR) and (2) bring a letter to the instructor indicating the need for an accommodation and what type. **Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from CeDAR has been provided.** For more information about students with disabilities, contact the:

Center for Disability Access and Resources (Tallahassee Campus), 640 Gamble Street, Tallahassee, FL 32307 (850) 599-3180 (voice), (850) 561-2783 (TDD). Email: cedar@famuedu.edu

In-Class Recording FAQs and Protocols

When can a student record? A student may record a class lecture for three specified purposes as outlined in House Bill 233/section 1004.097, Florida Statutes:

- 1). For the student's own personal educational use; 2). In connection with a complaint to the University where the recording is made; or 3). As evidence in, or in preparation for, a criminal or civil proceeding. **Can a student share a recording with another student? No. A recording of a class lecture may not be published without the [written] consent of the lecturer.** Publish

means share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section.

What happens if a student publishes a recording without getting written consent first? If a student publishes a recording of a class lecture without the lecturer’s written consent, and it is not in connection with a University complaint or as evidence in a criminal or civil legal proceeding, the student could face severe legal and/or disciplinary consequences. Per HB 233/section 1004.097, Florida Statutes, the unauthorized publishing of the recording allows the lecturer to take the student to court for damages, including attorney’s fees, totaling as much as \$200,000. Additionally, the student may be referred to the Office of Student Conduct and Conflict Resolution for a potential violation of the Student Code of Conduct.

Does HB 233/section 1004.097, Florida Statutes, affect a student’s accommodations granted through the Center for Disability Access and Resources (CEDAR)? No. If a student has an accommodation through CEDAR to record class activities, the accommodation is for the student’s own personal educational use. Accordingly, the student may not share the recordings without the lecturer’s written consent.

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Agreement Documentation: Students must read all policies governing this course and if they wish to continue with this course, are to sign below and submit within 1 week of class, thus are expected withdraw if they do not agree with all class policies specified.

I have read entire syllabus and hereby agree to comply with all policies outlined (above or referred).

Signature: **Date:**