Molecular Biology Lab
Biol 312L

Course Overview
This course will provide students with a thorough review of molecular biology techniques and concepts, with an emphasis on techniques and concepts used in modern research. It will have a focus on the molecular biology of aging.

Learning Objectives
BioMASL will provide a deeper understanding of:
- Safety in the Molecular Biology Lab
- DNA isolation and purification
- PCR: amplification, and analysis
- Transformation assays
- Quantitative analysis
- Molecular biology of aging
- Molecular biology in the news

Course Materials
You will need:
- A bound composition notebook (100 pages)
- A lab coat
- All course materials, including the syllabus, study guides, handouts, protocols, and accompanying papers, are on Canvas.
- Instructions for lab reports and other assignments are on Canvas.

COURSE EXPECTATIONS

Prepare for class
- Read protocols and relevant background info before lab meetings.

Electronics
- Laptop and tablets may be used for class-related exercises only.

Workspace
- Students are expected to clean up their bench and common areas before leaving.

Participation
- Active participation in lab via discussion and questions will enhance the experience for all.

GRADING
Weekly Quiz: 25%
Midterm Exam: 25%
Post-Lab Assignments: 50%
100%

Office Hours (or by appointment)

Attendance Policy
A student will receive a Lab Partially will be dropped from the course with a grade of F or W.

Honor Code and Academic Integrity
This course will be conducted in an atmosphere of scholarship characterized by honesty and mutual respect among students and faculty. Any violation of this policy will be addressed according to the procedures outlined in the Honor Code.

Disability/Access Needs
Any student with disabilities who requires accommodation should contact the Disability Coordinator or the Office of Services to Students with Disabilities.

SGS Policies on Lab Safety
Students are expected to follow the campus and laboratory safety procedures outlined in the School of General Studies Handbook.

Background
- Research involves the study of the molecular biology of aging.
- Understanding aging is crucial for improving human health and promoting longevity.
- The course will provide a comprehensive overview of molecular biology techniques and concepts used in modern research.