

**Laboratory Techniques in Biotechnology      JUNE 11 - JULY 30, 2024**  
**Summer Semester 2024**  
**BIOL 6010 (CRN# 53463)      Special Topics in biology**  
**Credit hours: 4**

**Instructor:** Dr. Ansul Lokdarshi  
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**Office (Student) hours      Wednesday 3:30 PM- 5:00 PM in my office, BC2212 or by appointment**

<b>Lecture (BC 1202)</b>	<b>Tuesday and Thursday</b>	<b>11:10 AM</b>	<b>1:10 PM</b>
<b>Lab (BC 2071)</b>	<b>Tuesday and Thursday</b>	<b>1:30 PM</b>	<b>5:20 PM</b>

**Pre-requisites:** BIOL 1107, BIOL 1108 or permission from instructor.

**Course description:**

The lecture will focus on building/refreshing and advancing concepts for a variety of key lab techniques such as electrophoresis, spectrophotometry, polymerase chain reaction, microbial aseptic techniques, bioinformatics, CRISPR etc., that are essential to biology related careers.

Laboratory exercises will provide extensive hands-on experience with lecture related topics, in addition to strengthening the ideas of experimental design (developing hypotheses, setting up an appropriate experiment, statistics and evaluation of data).

Although laboratory experience with practices such as sterile technique and pipet usage are ideal, these techniques will be part of the early-on laboratory instructions.

This course also benefits students who are aspiring for careers outside medical, dental, nursing and pharmacy schools such as molecular technologists, laboratory technicians, research associates, school teachers.

This course learning outcomes support the achievement of the Department of Biology Educational Outcomes 1, 3 and 4 (<http://catalog.valdosta.edu/pdf/2021-2022.pdf>) ([https://www.usg.edu/academic\\_affairs\\_handbook/section2/C738](https://www.usg.edu/academic_affairs_handbook/section2/C738)).

**Attendance:**

**Attendance to both lecture and lab is required.** If you miss a lecture or lab I reserve the right to determine what constitutes an excused or unexcused absence. To name a couple of examples of unexcused absences, scheduled appointments or leaving town, except for University related activities (e.g. you are on a sports team or are

Quizzes and in-class assignments will be given throughout the semester, which is why attendance is required. Generally, quizzes or in-class assignments in lecture cannot be made up if lecture is missed. If you miss the lecture and I approved your absence the total number of points possible to you will be reduced. If you miss quizzes and/or in-class lecture assignments and I did not approve the absence a zero will be given for that particular assignment, quiz, etc.

Lectures and Labs cannot be made up; therefore do not miss either. I also reserve the right to determine what constitutes an excused absence from lab. If you miss 2 labs (excused or unexcused) you will earn an F for the course as per University policy.

If students must be absent due to a quarantine or isolation requirement for COVID-19, they must report this situation via the COVID Self Reporting Link in MyVSU and through the Dean of Students Office to report any other absences as well.

**Mid-term and Attendance:** Students will have several lecture and laboratory assignments to determine their overall







