

Antelope Valley College  
Spring 2019

Biology 205- Intro to Biotechnology Lab  
UH 153  
Fridays 1100-1405  
Course # 36929

**Instructor:** Mr. Jedidiah (Jedi) Lobos

**Office Hours:** Mondays & Wednesdays 0950-1050, 1600-1700 and Thursdays 1300-1400 in UH 138

**E-mail:** [jlobos@avc.edu](mailto:jlobos@avc.edu) or [LobosBiology@gmail.com](mailto:LobosBiology@gmail.com) (enter "Bio 205" on the subject line or e-mail may be overlooked)

**Website:** <http://LobosBiology.com>

**Sheriff Department Emergency Contact Number**

- Dial direct: 661-722-6399
- From campus phone #4444 or #6399

**Materials Needed:** You will need a total of three (3) large green (or blue) books, three (3) regular (882-E) scantrons, a #2 pencil (for the scantron), and a pack of 3" x 5" index cards. You can find most (if not all of these) in the Marauder Bookstore.

**Course Description:** The course will introduce the student to theoretical and applied concepts of Biotechnology- the use of living organisms or their products to enhance our lives and our environment. The content will cover the concepts of DNA structure, gene expression and protein synthesis. The laboratory techniques used in the Biotechnology industry will be learned and practiced by the students, including keeping a detailed lab notebook, learning and using calculations for solution preparation, preparing and analyzing DNA and protein samples by enzyme digest and gel electrophoresis, amplifying DNA by Polymerase Chain Reaction, and isolation of protein and DNA with separation techniques. Applications of these techniques in the Agricultural, Medical, Pharmaceutical and Forensic fields will be discussed.

**Course Objectives:** See lecture syllabus

**Student Learning Objectives:** See lecture syllabus

**Concurrent Enrollment & Course Prerequisites:** Completion of MATH 102 and Completion of CHEM 110. Advisory: Completion of a general biology course is recommended. Eligibility for College Level Reading and Eligibility for ENGL 101

**Disruptive or Disrespectful Behavior:** Disruptive or disrespectful behavior will not be tolerated in the class. Examples of such behavior may include talking while others in the class (including the instructor) are talking and disregard of any of the policies that are outlined in this syllabus. Any such behavior may lead to the student being asked to withdraw themselves from the class for that period.

**Cell Phone Policy:** Use of cell phones is disruptive to the class. Please turn your cell phone completely off or silence it during class. Advise people who might call you that they should not do so during the scheduled class time. Cell phones may not be answered during a class session, unless it is during an instructor authorized break. It is also not permitted to send text messages while class is in session. Disregarding this policy will result in a deduction of attendance/participation points and/or immediate dismissal from class for that period.

**\*\*\*Students are NOT PERMITTED to take pictures of the materials presented in class or on the board (unless part of an OSD accommodation) \*\*\***

**Other Electronic Devices:** You may use a tablet, e-reader, or computer to access the class notes and to annotate them. However, if you wish to use such devices, you **MUST** sit in one of the seats located in the first two rows of the classroom.

**Seating Arrangements:** The instructor reserves the right to change student seating arrangements in the class at any time and for any reason he feels is justified.

**Tardiness and Attendance:** Regular and prompt attendance to class is essential both for learning and active participation in the class. Each student needs to be present to hear about any schedule changes, general information about the class, and the lecture itself. In addition, quizzes may be given at the beginning of a class session. Students who arrive five minutes after a quiz is administered will not be allowed to take the quiz. Attendance may be taken at any time during class and in any manner as deemed appropriate by the instructor. **If a student's absences in a specific class exceed the number of hours the class meets per week, the student may be prohibited from further attendance in the class.** The first two days of class are important, therefore missing any one of these days means the student might be dropped from the class.

**Evaluation:** Your grade will be computed based on the following criteria:

Quizzes (written and skills)= 100 pts

Lab notebooks= 100 pts

Student presentation= 150 pts

**This adds up to a total of 350 for the lab alone.**

**Extra Credit:** At the instructor's discretion, extra credit opportunities may be offered to all students in the class, however, students should not assume that "extra credit" opportunities will automatically be given, and there will be no "individualized" extra credit assignments.

**Lab Notebook:** You will be required to keep a lab notebook for the semester. It must be a bound notebook (either a composition book or spiral bound book). You need to leave the first 5 pages blank for a Table of Contents. For each lab, you will have the following: Date of the experiment, Title of the experiment, Purpose, Materials and methods used, Results, and Conclusions.

**Quizzes, Practica and Exams:** The quizzes and exams may consist of multiple choice, short answer, or essay questions and the format may vary from quiz to quiz. The format of exams and quizzes will be explained in class. **Except for excused medical or certified family emergencies or recognized religious holidays, no makeup quizzes or exams will be given.** Quizzes and exams will be given on the day scheduled. At the discretion of the instructor, additional short quizzes may be given on any class day. The instructor reserves the right to adjust testing conditions, randomize and assign seating for a quiz or exam, rearrange students during a quiz or exam, or to immediately terminate the quiz or exam of any student who, in the opinion of the instructor, is caught cheating.

**Preparation and Participation:** Every student is expected to be actively involved in the lecture sessions and to come to each session prepared (having thoroughly read and studied the corresponding chapters or handouts assigned). Each student should also participate by contributing ideas or information, and asking questions. The instructor will ask questions periodically to evaluate the participation of individuals in class. **The answers to these questions will not be graded based on if they are correct or not.** Rather, the answers will be counted for participation points for that day. Answers will either be written on an index card or recorded electronically.

**Lab Technique, Skills and Safety:** The instructor, using various means as he deems appropriate, will evaluate each student on general lab technique, skills, and ability to work safely.

**Lab Seating Arrangements:** The instructor reserves the right to change student seating arrangements in the lab at any time and for any reason he feels is justified.

**Withdrawal Information:** It is the student's responsibility to withdraw from a class. If you fail to withdraw by the appropriate date, you will receive the letter grade you would have earned at the end of the semester. For this term, the last day to drop with a "W" is **5/3/2019**.

### **Incompletes**

A grade of "I" (Incomplete) will not be given simply due to poor performance in the course. An "I" is to be used only when a portion of the required coursework has not been completed and evaluated in the prescribed time period due to unforeseen but fully justified reasons. A substantial portion of the course requirement must have been completed with a passing grade and there is still the possibility of earning credit. The work that is incomplete normally should be of such a nature that it can be completed independently by the student for later evaluation by the instructor. An incomplete will not be assigned when a student would be required to attend a major portion of the course when it is next offered. Students who believe they meet the necessary conditions to be assigned an incomplete arrange to meet in person with the instructor. The process should be completed in person prior to submission of final grades by the instructor. Students are encouraged to read and understand the statement on incompletes in the current Antelope Valley College Catalog.

**Reasonable Accommodations:** If you have a legally protected disability under the Americans with Disabilities Act (ADA) or California discrimination law, and you believe you need reasonable accommodation to participate fully in this class, please make an appointment to see me during office hours to discuss your need(s).

**Academic Honesty:** Cheating of any kind will not be tolerated. If a student is caught cheating, the instructor reserves the right to assign the assignment, quiz, or exam a grade of "F" to the student caught cheating. **From the 2016-2017 AVC Catalog:** (a) Violation of the Academic Honesty Policy: Dishonesty, including but not limited to, cheating or plagiarism. Plagiarism – from the Latin word for "kidnap" – involves using another's work without giving proper credit, whether done accidentally or on purpose. This includes not only works and ideas, but also graphs, artwork, music, maps, statistics, diagrams, scientific data, software, films, videos and the like. Plagiarism is plagiarism whether the material is from published or unpublished sources. It does not matter whether ideas are stolen, bought, downloaded from the internet, or written for the student by someone else – it is still plagiarism. Even if only bits and pieces of other sources are used, or outside sources reworded, they must still be cited. To avoid problems, students should cite any source(s) and check with the instructor before submitting an assignment or project. Students are always responsible for any plagiarism in their work. An instructor who determines that a student has cheated or plagiarized has the right to give an "F" grade for the assignment or examination. Antelope Valley College reserves the right to utilize electronic means to investigate possible academic violations. Enrollment in any class implies student agreement and consent that all assignments are subject to submission for textual similarity review to an electronic database. (b) Violation of class assignments, examination rules, e.g., communicating or transferring information to another student, using any materials such as books, notes, etc., other than those expressly allowed for the exam, looking at another student's exam, etc. (c) Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including, but not limited to, handwritten or typewritten class notes, except as permitted by any college policy or administrative procedure.