

Antelope Valley College
Spring 2020

Biology 204L- General Microbiology Lab
UH169
Tuesdays and Thursdays 1800-2105
Course # 36025

Instructor: Dr. Jedidiah Lobos

Office Hours: Tuesdays & Thursdays 1100-1200, Wednesdays 0930-1230 in UH 138

E-mail: jlobos@avc.edu or LobosBiology@gmail.com (enter "Bio 204" 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 bound notebook (composition or spiral-bound), a permanent marker, and a pack of 3" x 5" index cards. You can find most (if not all of these) in the Marauder Bookstore.

Course Description: See lecture syllabus

Course Objectives: See lecture syllabus

Student Learning Objectives: See lecture syllabus

Concurrent Enrollment & Course Prerequisites: Completion of BIOL 101 or completion of BIOL 110 or completion of BIOL 120 and completion of CHEM 101. **Advisory:** Completion of BIOL 201, completion of BIOL 202, completion of CHEM 102, completion of ENGL 101, completion of COMM 103

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. Furthermore, you are expected to act in accordance with the AVC Student Code of Conduct.

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= 100 pts
- Lab participation and skills= 50 pts
- Lab notebooks= 50 pts
- Lab practicum= 100 pts
- Unknown determinations and identifications= 50 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, true/false questions, short answer or essay questions and the format may vary from quiz to quiz. The format of exams, isolate submissions, notebooks, etc. will be explained in class. Except for excused medical or certified family emergencies or recognized religious holidays, no makeup quizzes, practica or exams will be given. Quizzes and exams will be given on the day scheduled. At the discretion of the instructor, additional short quizzes or practica may be given on any class day as part of the evaluation of lab technique or preparation/participation components. Caps or sunglasses may not be worn during a quiz, practicum or exam. The instructor reserves the right to adjust testing conditions, randomize and assign seating for a quiz or exam, rearrange students during a quiz 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 laboratory sessions and to come to each session prepared (having thoroughly read and studied the corresponding lab exercises or handouts assigned). Each student should also participate by working well with lab partners, contributing ideas or information, or asking questions. The instructor, using various means as he deems appropriate, will assess student preparation and participation, including attendance.

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.

Student Responsibilities:

1. Each student is required to provide and wear a laboratory coat in the lab. The lab coat must not removed from the lab unless special arrangements are made with the instructor. In addition, no open-toed shoes or sandals may be worn in the lab.
2. Each student is required to provide a laboratory manual and bound laboratory notebook and bring them to class each session.
3. Each student must abide by all safety rules (see separate handout)
4. Each student is responsible for keeping laboratory notes. Laboratory notes and the laboratory manual may be collected at any time.
5. Each student is responsible for the proper labeling and incubation of cultures.
6. Each student is responsible for all laboratory work missed, including quizzes. There is no real provision for making up a missed lab, so on-time attendance every day is crucial.
7. Each student is expected to actively participate in all parts of the lab exercises and discussions.

8. After isolation/purification each student is responsible for maintaining the unknown isolates on a plate until the end of the semester. Streaks of these axenic cultures will be turned in for grade consideration.

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 **5/1/2020**.

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.

AB 705: Based on statewide research and the newly enacted AB 705 legislation, Antelope Valley College students are eligible to begin English and mathematics courses at the transfer-level. This is a new process for AVC students that uses high school coursework, grades and grade point average to place students into English and mathematics courses. We want to remind you of the various resources available for academic assistance including workshops and tutoring in the Learning Center and arithmetic to calculus support in the Math Computer Lab in ME 100. To see a complete list of English, reading and mathematics workshops, visit <https://www.avc.edu/studentservices/lc/>. We encourage you to visit the Math Computer Lab and use these resources for support with your courses. Do not hesitate to ask for help, and we hope you have a great semester!

Biology 204- General Microbiology**Spring 2020 Tuesdays and Thursdays 1800-2105****Course # 36025**

Week	Date	Topic	Prep
1	2/4	Lab orientation, Preparing culture media	TSA (Intro Media Prep lab)
	2/6	Microscope	
2	2/11	Microscope (cont), Wet mount, Aseptic plate pouring	Bacterial Culture Characteristics, Fungi: Yeasts and Molds
	2/13	Ubiquity of microorganisms, Aseptic Technique	
3	2/18	Bacterial Enumeration Lab, ORPL	Temperature, UV experiment
	2/20	Streaking for Isolation, ORPL	Anaerobic cultures, Disinfectants and Antibiotics
4	2/25	Bacterial culture characteristics, Fungi: yeasts and molds, ORPL	Exoenzymes
	2/27	Smear Prep and Simple stain, ORPL (Yeasts)	Carbohydrate fermentations, Hydrogen sulfide production, Urea hydrolysis
5	3/3	Gram stain, Capsule Stain (Demo), ORPL (Molds)	Nitrate reduction, IMViC
	3/5	Endospore stain, Acid-fast stain (demo), Protozoa	
6	3/10	Platyhelminthes, Nematodes	Selective and differential media
	3/12	Temperature, UV experiment	
7	3/17	Anaerobic cultures, Disinfectants and Antibiotics, ORPL	Intestinal pathogens (enterics)
	3/19	Exoenzymes, ORPL	Staphylococci, Streptococci
8	3/24	Carbohydrate fermentations, ORPL	Urine culture
	3/26	Hydrogen sulfide production, Urea hydrolysis, ORPL	
	3/31		
	4/2		
9	4/7	Nitrate reduction, IMViC, ORPL	
	4/9	Coagulase test, Selective and differential media, ORPL	
10	4/14	Intestinal pathogens (enterics), ORPL	
	4/16	Staphylococci, Streptococci, Enterics (cont)	
11	4/21	Enterics (cont), Urine culture, ORPL	
	4/23	Enterics (cont), Urine culture (cont), ORPL	
12	4/28	Urine culture (cont)	Unknowns
	4/30	Urine culture (cont)	
13	5/5	Prepare for unknowns, ORPL	
	5/7	Unknowns	
14	5/12	Unknowns (cont)	
	5/14	Unknowns (cont)	
15	5/19	Unknowns (cont)	
	5/21	Unknowns (cont)	
16	5/26	Unknowns (cont)	
	5/28	Final lab practicum	

Topics and dates are subject to change with notice