

VALDOSTA STATE UNIVERSITY

BIOLOGY 2260—Fall 2023

INSTRUCTOR: Dr. J. A. NIENOW

OFFICE: 2089 Bailey Science Center; 249-4844

Office hours: MW 3:30 to 5:00, TTh 9:30 to 10:30 or by appointment

EMAIL: jnienow@valdosta.edu

RECOMMENDED TEXTS:

- Foster, J. W., Z. Aliabadi, J. L. Slonczewski. 2021. Microbiology, The Human Experience. 2nd edition. W. W. Norton, New York.
- Any other microbiology book published within the past 10 years that fits your wallet.

OTHER RESOURCES:

- BlazeView – PowerPoints, Lab exercises, Assignments, Kaltura recordings, etc.

PREREQUISITES: None

COURSE GOALS:

- Students will acquire basic knowledge of bacteriology, immunology, and virology with an emphasis on applications and disease processes.
- Students will gain experience with some basic techniques used for studying microorganisms in the laboratory including aseptic technique, transfer and culture of bacteria, identification and quantification of bacteria, and antibiotic sensitivity testing. Students will learn how to prepare and give an oral presentation on a clinical microbiological topic.

ATTE

ATTIRE: Lab aprons, face shields and glove will be provided and must be worn during lab. SANDALS, FLIP-FLOPS AND OTHER OPEN-TOED SHOES ARE NOT PERMITTED IN LAB. IF YOU ARRIVE IN FOR LABS SANDALS OR FLIP-FLOPS YOU WILL BE SENT HOME TO CHANGE.

LECTURE EXAMS: There will be five unit exams and a comprehensive final exam. The unit exams will each be worth 100 points; the final exam will be worth 200 points. All the exams will be on-line in BlazeView. Lecture exams will consist of 76 multiple choice questions that you will have to answer correctly in 75 minutes. BE PREPARED. The final exam will consist of 150 multiple choice questions that you will have to answer in 120 minutes. Again, BE PREPARED. The dates of these exams are included in the attached schedule of lectures. DO NOT MISS THESE EXAMS WITHOUT PRIOR PERMISSION. Exams missed without prior permission of the instructor may be made up, but the final score on the exam will be reduced by 25%. It is the student's responsibility to contact the instructor to set up a time to take a make-up exam. Arrangements for a make-up exam must be made within 1 week of the missed exam, otherwise no make-up will be given and the student will receive 0 points for the exam. If you are caught cheating on an exam you will receive 0 points. Estimated total from lecture exams—700 points.

LABORATORY EXAMS: There will be two laboratory exams. The first, a lab skills test, is worth 75 points; you may use any notes you wish for this exam. The second will consist of 25 PowerPoint slides illustrating some of the procedures and tests conducted during the lab. Each slide will have two questions requiring either an explanation of the purpose and set-up of the procedure, details of the material used in the procedure, or an analysis of the results, and will be displayed for 60 seconds. You may use a completed study guide, but no other materials, during the exam. This exam is worth 100 points. Estimated total from laboratory exams—175 points.

ADDITIONAL LABORATORY GRADES AND ASSIGNMENTS: Some of your lab work will be assessed and assigned points based on the quality of the work. In addition you will occasionally be asked to complete informal and formal reports of your lab work. Most of these assignments have specified due dates; pay attention them. Once an assignment has been handed back, you can no longer turn it in for credit.

concern to vsubmit@valdosta.edu; or 2) Fill out the anonymous Concerning Behavior Reporting Form at <https://www.valdosta.edu/administration/student-affairs/student-conduct-office/our-services.php>. For more information about the BIT Team at <https://www.valdosta.edu/administration/student-affairs/bit.php>

STUDY TIPS

- It is recommended that you form small study groups and study together in the library or other locations without TV, stereo or other distractions.
- Before you begin reading a chapter, make a very quick outline using the chapter subheadings, this will give you some idea of what the chapter is all about and how it is organized.
- You should read ahead of the schedule. So when you come to class you can ask questions.
- Answer the review questions at the ends of the chapters.
- When studying, ask yourself how this information would be applied.
- Come to office hours and ask questions if there is material you do not understand.
- Attend lecture in person and ask questions in class!! If you cannot attend lecture, be sure to watch the recordings posted in the Kaltura Media Gallery in BlazeView.

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| 9-14-23 | LECTURE— Dynamics of bacterial growth DISEASE OF THE DAY—Bacterial food poisonings | pp. 156-186 |
| WEEK 6 | | |
| 9-18-23 | LAB--Set up <i>Enumeration</i> | |

| WEEK 11 | | |
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| 10-23-23 | LAB--Complete <i>Staphylococcus</i> Experiment: Slide agglutination LAB—Set up Antimicrobial Sensitivity Testing | Lab Exercise 19 |
| 10-24-23 | LECTURE—Bacterial genetics DISEASE OF THE DAY—Coronavirus infections | pp. 225-244 |