

ANIMLSC 366: Veterinary Microbiology

Microbiology for Veterinary and Animal Sciences

Course Information

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GOALS OF THE COURSE

The intent of this course is to introduce students to veterinary microbiology laboratory techniques and procedures, and to help students learn how to use these techniques to investigate the diversity, growth, and pathogenicity of microbes, focusing on the importance of microbes in animal health and disease.

LABORATORY MANUAL

You will be provided with a laboratory manual, Veterinary Microbiology Laboratory (pdf on Moodle). You must supply your own laboratory notebook (see below). Carefully read “General Rules of the Laboratory” (at the beginning of the lab manual). Be sure to read the appropriate section of the manual and other assigned readings **before** coming to class. Come prepared – the course will be immeasurably more enjoyable and beneficial to you.

LABORATORY NOTEBOOK

You are required to maintain a laboratory notebook. You must supply your own notebook with bound pages (a spiral-bound notebook is fine, but loose-leaf notebooks are not), and bring it to every lab session. A **Table of Contents** is required – reserve the first two (or more) pages of your notebook for the Table of Contents. **Before** each lab period write a **brief outline** including **objectives** of the lab exercise scheduled for that day. Record observations and data directly into your notebook **during** lab. **After** each lab, add explanation, discussion and conclusions. If you include additional pages (e.g., graphs), attach them (e.g., with tape) to a page in your notebook. Detailed requirements and helpful hints on maintaining your laboratory notebook may be found in the lab manual.

NOTEBOOK REVIEWS

Notebook Reviews will be announced one week prior to collection. Each student will be responsible for finishing notebook write-ups for laboratory exercises that have been completed. An incomplete notebook will result in loss of points. Grading will be based on: 1) Title/Date, 2) Description of background and objectives for each laboratory, 3) Observations/Results, and 4) Discussion of Results.

QUIZZES & PRACTICAL EXAM

Short weekly quizzes (~2 questions) will be given during the semester. Material will be taken directly from the class discussions, assigned readings, and experimental procedures. A practical exam will test your ability to perform and understand experimental procedures learned in the lab at the end of the course.

TEAM LAB REPORTS

Laboratory exercise will involve both individual and team-based activities. You will be required to prepare a team lab report for two laboratory exercises.

LABORATORY ATTENDANCE, PRE-CLASS PREPARATION, POST-CLASS FOLLOW-UP

Attendance is **REQUIRED** – **NO MAKE-UP LABS** will be scheduled. An unexcused absence will result in a loss of points for the laboratory missed. You are expected to spend **at least three hours each week outside of class** annotating your laboratory notebook, meeting with teammates to discuss team lab reports, and preparing for the next class.

COURSE GRADING

Grading will be out of 100 points and based on the following:

2 Notebook Reviews (40%)

2 Team Lab Reports (20%)

20 Quiz questions (20%)

1 Practical Exam (15%)

1 team & self-evaluation (5%)