MINOT STATE UNIVERSITY
Course Outline

GENERAL MICROBIOLOGY LABORATORY

Bio 142
Thurs 9-10:50 a.m; Thurs 11-12:50
Moore 318

Course instructor
Heidi Super, Ph.D
Office: Moore 229
Phone: 858-3079
e-mail: heidi.super@mintotstateu.edu
office hours: MWF 2-3 or anytime by appointment.

Description
Labs meet once a week in 2 hour blocks. Lab points are averaged into your final grade with lecture exam scores. Attendance is **mandatory** for class credit and absence cannot be made up outside of scheduled lab time. Be aware that missing one lab usually means missing 2 labs since we often finish one and begin another in the same week. **Unexcused absence will result in loss of points for at least one, possibly both labs.**

Lab Notebooks/reports
Students will be required to keep a lab record book (3-ring is preferable) and to write up lab exercises (reports) as instructed or to prepare for lab quizzes. Accurate records of observations/procedures will be critical for success in lab.

Lab points (~75) will be distributed between the following:
Lab quizzes
Lab reports
Lab practicals (scope work, lab technique, unknown identification)
Lab courtesy and cooperation

Lab Schedule---NO labs during week one.
(subject to change)

Week 2

Introduction/Safety/Media/Making solutions/Metric system
Microorganisms in our environment

Week 3

Pure cultures—streaking and aseptic technique

Week 4
Introduction to the microscope

Week 5
Differential/Gram Stain/ bacterial morphology

Week 6
lab quiz/practical

Week 7
Enumeration (counting) of Bacteria in culture
Effect of Temperature on bacterial growth

Week 8
Endospore staining

Week 9 Antibiotic sensitivity

Week 10
Resistance of bacteria to antibiotics I (acquired resistance)

Week 11
Resistance of bacteria to antibiotics II
Lab quiz

Week 12
Veterans holiday–no lab Bacteria as molecular biology tools---bacterial transformation

Week 13
Differentiation of bacterial species I

Week 14
Differentiation of bacterial species II

Week 15
Genetic transformation/acquired antibiotic resistance

Week 16 Follow up/lab quiz