

BSC 250 – Microbiology and Human Disease

Fall Semester 2017

5 – 7:20 Tuesday/Thursday

Hurricane High School

Instructor: Seth Perry

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Office/Hours: After class or by appointment

University Policies:

By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802

Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Course Description:

Introduction to microbiology with emphasis on the role of microorganisms in the disease process.

Course Objectives:

1. Students will understand the methods and applications of biological science.
2. Students will be able to apply biological science in the laboratory setting.
3. Students will gain knowledge of the microbiological relationship to the human body.
4. Students will understand the structure and behaviors of prokaryotic organisms.
5. Students will describe the immune response in relation to infectious diseases.

Required Texts, Additional Reading, and Other Materials

Lecture: *Nester's Microbiology: A Human Perspective*, 8th Edition. Denise Anderson, Sarah Salm, Deborah Allen, Eugene Nester. ISBN: 9780073522593

Course Evaluation:

Assignments	Points
4 Lectures Exams	400
12 Labs	300
Total	700

Grading Scale:

A: 90 – 100
B: 80 – 89.9
C: 70 – 79.9
D: 60 – 69.9
F: 0 – 59.9

Attendance Policy

University Excused Absences: These are addressed by the instructor or the Dean of Student affairs as described in each item. Appropriate documentation is required for each absence. The Dean of Student Affairs will notify course instructors of his or her actions using the University email system. **University-sponsored activities. Medical circumstances. Death or critical illness of an immediate family member. Other official activities – Military, Jury Duty, Religious Holidays. Extreme personal emergencies - examples of such events include house fires, serious crimes, etc.**

Class Responsibility:

- If you are going to be late, send an e-mail and let me know. That way I can expect you later.
- Attendance is important. Due to the fact that some materials are perishable, some labs cannot be made up. Try your best to make it on lab days. **Any Unexcused Absences** on lab days will result in a 0 for that lab.
- During bad weather or closures of Hurricane High School, there will be no class that evening. I will e-mail you when I get that information.
- I will remind you of upcoming tests and end of the unit dates but it is your responsibility to write down and remember these dates.
- If you miss an exam you will need to have an approved **MU Excused Absence**. You have 2 days to make it up on your own time at the TVRC office in Teays Valley.
- There is no extra credit. There are no retakes on exams.

Course Schedule

This schedule is tentative and subject to change depending on weather and school system situations.

Week	Tuesday	Topic	Thursday	Topic
1	8/22	Humans and Microbial World / Lab #1	8/24	Molecules of Life
2	8/29	Microscopy and Cell Structure / Dynamics and Control of Microbial Growth	8/31	Lab #2
3	9/5	Metabolism Fueling the Cell / The Blueprint of Life from DNA to Protein	9/7	Lab #3 / Grow Lab #4
4	9/12	Exam 1	9/14	Lab #4 / Grow Lab #5
5	9/19	Bacterial Genetics / Biotechnology, and Recombinant DNA	9/21	Lab #5 / Grow Lab #6
6	9/26	Identifying and Classifying Microorganisms / The Diversity of Bacteria and Archaea	9/28	Lab #6
7	10/3	The Eukaryotic Members of The Microbial World / Viruses, Viroids, Prions	10/5	Lab #7 / Grow Lab #8
8	10/10	Exam 2	10/12	Lab #8 / Grow Lab #9
9	10/17	Innate and Adaptive Immune Responses / Host Microbe Interactions	10/19	Lab #9 / Grow Lab #10
10	10/24	Immunologic Disorders / App of Immune Response	10/26	Lab #10 / Grow Lab #11
11	10/31	Halloween	11/2	Lab #11
12	11/7	Epidemiology / Antimicrobial Medications	11/9	Exam 3
13	11/14	Respiratory / Skin Infections	11/16	Wound / Digestive Infections
14	11/20 – 11/24		Fall Break	
15	11/28	Blood and Lymphatic / Nervous Infections	11/30	Genitourinary Tract Infections / Microbial Ecology
16	12/5	Environmental Microbiology / Food Microbiology	12/7	
17	12/12	Exam 4	12/14	Exam 4