**BIO 321 MICROBIOLOGY: SPRING 2016**

I. Purpose: a study of microorganisms, bacteria, fungi, viruses, and

rickettsia, and their interactions with humans

II. Textbook: Microbiology: An Introduction, Brief Edition Tortora, Funke

and Case, Benjamin Cummings/Pearson, 2005, ISBN 0-8053-

7753-0 will be provided; Lab Notebook: In-house Production

III. Attendance/lectures: Regular and punctual attendance is expected

of all students. The University Undergraduate Attendance Policy will

be followed in this course

IV. Attendance/exams: There is no excuse for missing a scheduled exam

without contacting the instructor ahead of time. With prior

notification, arrangements can be made to take the scheduled exam.

There will be no makeup exams. If an exam is not taken at the

scheduled time or by arrangement, the value of the comprehensive

final exam is increased proportionately.

V. Requirements: 3 hour exams + 1 comprehensive final + laboratory (see

below for laboratory) + additional assignments as deemed appropriate

1st exam: ‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑ 100 points

2nd exam: -----------------‑‑‑‑‑‑‑‑‑‑‑‑‑ 100 points

3rd exam: ----------------‑‑‑‑‑‑‑‑‑‑‑‑‑‑ 100 points

Final exam: comprehensive + new material 150 points

Laboratory: ---------------------------- 150 points

Additional assignments ----------------- 50 points (optional)

600/650 total points

1st Exam: introduction, cell structure and physiology

2nd Exam: genetics, survey of bacteria, fungi & viruses, topic due

3rd Exam: disease and immunity

Final Exam: comprehensive + applied microbiology

VI. Laboratory: The laboratory component will count approximately 25%

of the final grade in the course. Requirements will include two

laboratory exams (written exams), one at mid‑term and another

at the end of the semester), a report on a disease and a notebook of

exercises and results. Additionally, we will view a number of

videos as part of the lab component. Questions about material

covered in the videos may be on both lecture and lab exams.

Topics to be covered on laboratory exams:

1st exam, midterm, exercises thru 7.5 ‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑‑-150 points

2nd exam, final lab, exercises 8.1 to end, comprehensive ‑150 points

Notebook ------------------------------------------------- 20 points

Report on an infectious disease -------------------------- 50 points

370 points

The percentage of 370 points earned will be multiplied times 150

points to determine the laboratory grade.

The following is IMPORTANT information about the report:

You are to use sources available in or through the Montgomery Library

for most of your information; however, you are allowed to use

selected internet sites, not Wikipedia! Acceptable internet sites

would include the Centers for Disease Control, Johns Hopkins

University, Mayo Clinic, and the Cleveland Clinic. Exceptions to

These guidelines will be made on an individual basis. A hard copy and

and an electronic copy will be turned in so that references can be

verified. The report should not be over 6 pages in length with about

4-6 references. The topic for the report will be assigned by the

instructor, and some evidence of progress is to be produced by the

second lecture exam.

The report is to include information on **MORBIDITY, MORTALITY,**

**ETIOLOGY, PATHOGENICITY, DIAGNOSIS, IMMUNOCHEMICAL CONTROL, and**

**PUBLIC HEALTH CONSIDERATIONS.**

VII. Grading Scale: The grading scale will be a 10‑point scale based on

a total 600 points for the entire course.

VIII. Responsibility: Students are responsible for all material covered

or assigned in lecture and laboratory. Recording devices are not

allowed in class or in the laboratory. Because of the nature of the

laboratory, which uses living material, it may not be possible to

make up laboratory work.

IX. Disability Statement

Campbellsville University is committed to reasonable accommodations

for students who have documented learning and physical disabilities

as well as medical or emotional conditions. If you have a documented

disability or condition of this nature, you may be eligible for

disability services. Documentation must be from a licensed

professional and current in terms of assessment. Please contact the

Coordinator of Disability Services at 270-789-5192 to inquire about

their services.

X. Emergency Numbers – Campus Security

**270-403-3611 (cell)**

**270-789-5555**

XI. Miscellaneous

A. Electronic devices

**ALL ELECTRONIC DEVICES INCLUDING CELL PHONES ARE TO BE TURNED OFF**

**DURING CLASS AND DURING LAB. NO RECORDING DEVICES OF ANY TYPE**

**INCLUDING CELL PHONES ARE ALLOWED TO BE “ON” IN CLASS OR IN LAB.**

B. There will be a $10 fee to cover the production of the notebook,

and the textbook will be rented for $5.

XII. Sexual Harassment Statement

Campbellsville University and its faculty are committed to assuring a

safe and productive educational environment for all students. In order

to meet this commitment and to comply with Title IX of the Education

Amendments of 1972 and guidance from the Office for Civil Rights, the

University requires all responsible employees, which includes faculty

members, to report incidents of sexual misconduct shared by students

to the University’s Title IX Coordinator.

Title IX Coordinator: Terry VanMeter, 1 University Drive, UPO Box 944

Administration Building 8A, Phone: 270-789-5016

[Email-twvanmeter@campbellsville.edu](mailto:Email-twvanmeter@campbellsville.edu)

Information regarding the reporting of sexual violence and the

resources that are available to victims of sexual violence is set

forth at: www.campbellsville.edu/titleIX

Report Topics:

1. Tuberculosis

2. Influenza

3. AIDS

4. MRSA/VRE

5. Meningitis

6. Herpes

7. Hepatitis

8. Rabies

9. Chestnut Blight

10. Histoplasmosis

11. Leprosy

12. Mad Cow Disease & variants

13. Typhoid

14. Cholera

Suggested Report Topics:

1. Evaluate the impact of AIDS on Sub-Sahara Africa

2. Analyze the nosocomial problem and hospital responses – MRSA/VRE

3. Investigate the bacterial quality of foods

4. Analyze the reasons for the return of tuberculosis

5. Investigate the threats of bioterrorism plus deterrence

6. Report on the emergence of new diseases: Hanta virus

7. Report on the emergence of new diseases: West Nile Virus

8. Investigate the Ebola Reston incident and the lessons learned

9. Report on recent trends in sexually transmitted diseases

10. Report on the history of the AIDS pandemic with emphasis on the

situation in sub-Saharan Africa

11. Evaluate the implications of antibiotic resistant bacteria

12. Analyze the threat of meningitis on college campuses

13. Report on the history of influenza pandemics

14. Evaluate the impact of Chestnut Blight to the forest ecosystem

including the future of the Chestnut tree.

15. Same as #14 with the American Elm tree.

Individual Diseases:

16. Tuberculosis – making a comeback.

17. Prions - Bovine Spongiform Encepahlopathy (Mad Cow Disease) – called

“slow” viruses in some older books

18. Brucellosis

19. Cholera

20. Typhoid

21. Leprosy

22. Histoplasmosis

23. Rabies

24. Herpes viruses

25. Pox viruses

26. Hepatitis

27. Individual selection: get approval of instructor