**Microbial Survey, BIO 233, Fall 2011**

**Lecture Syllabus**

**Professor**: Dr. Eric Matson

**Office**: Halsey Science 253

**Contact:** Email: matsone@uwosh.edu

**Office Hours**: Tues. 9 - 11 a.m., Fri. 9 - 10 a.m.

Other times by appointment.

**Lecture:** **MWF 11:30-12:30 p.m. Halsey Science 109**

**Required text**: **Microbiology [a human perspective] sixth edition** by Eugene W. Nester, Denise G. Anderson, C. Evans Roberts, Jr. and Martha T. Nester. ISBN 978-0-07-299543-5.

**About Bio 233:** This is a 4-credit class. It contains a 3-hour lecture component and a 2-hour laboratory component. You cannot pass this course if you do not attend and participate in the laboratory component of the class.

**Use of D2L:** Papers, documents, and web links for the course will be posted to D2L for your convenience. Some out of class quizzes may be administered by D2L.

**Exam policy: 1. ALL students are permitted to make up ONE regular exam by taking**

**a comprehensive substitute exam during the last week of classes.**

**2. There are no additional make up exams.**

**3. The final exam cannot be made up.**

Exceptions will be made only for extreme circumstances (e.g. death of a close relative or a documented medical event). Students are expected to contact the instructor in advance of the exam that they will miss. Only in such cases will a makeup exam consisting of a different, but similar set of questions, be administered. **See the course schedule for additional details on make-up exam policy.**

**Quiz policy:** Some quizzes may be **announced in class** and administered by D2L. Others will be **taken in class**. Quizzes cannot be made up. While there is no formal attendance policy, you must be present to earn quiz points.

**INFORMATION ON THE COURSE SCOPE, EXPECTATIONS, AND GRADING:**

**Course Description**

This course is a survey of microorganisms, including bacteria, viruses, and some algae, fungi, and invertebrates. Emphasis will be placed upon the health care applications of microbiology and transmission of infectious disease agents. Laboratory will focus on standard microbiologic techniques used in the allied health fields. This course is designed for those students interested in allied health fields, including biology, nursing and medical technology majors. Prerequisite: **one semester of general biology (BIO 105)**.

**Microbial Survey and Promoting the Liberal Arts:** A **liberal arts education** refers to studies in a college or university intended to provide general knowledge and develop intellectual capacities. A liberal arts education prepares students to work in a variety of jobs. This is different from other types of education where students develop professional or vocational skills for a specific job. The Pre-Nursing and Science Education Majors are offered courses at UW-Oshkosh within the College of Letters and Sciences (COLS). The COLS emphasizes a liberal arts education. It promotes a liberal arts education model proposed by Carol Geary Schneider, president of the Association of American Colleges and Universities since 1998. Schneider stresses the idea **that ALL students** **receive an education of lasting value, relevant for the 21st century**. In her model learning should be: 1) "analytical, contextual and holistic thinking;" 2) "effective communication using multiple literacies and forms of expression;" 3) "critical reflection/informed action as citizens, producers, human beings;" 4) "ethical action for local and global communities;" and 5) "integrative learning."

At UW-Oshkosh, you will have a broad exposure to the liberal arts, while focusing on a topic that you are particularly interested in such nursing or the sciences. BIO 233 (Microbial Survey), is a required course in the Nursing Program and an elective course in the Science Education Major. Microbial Survey is important in not only the study of infections and their treatment and prevention, **but also in the unraveling of the most fundamental aspects of biology**. This is because microbes have an intimate relationship with the basic machinery of their host cells. Thus, research on how microorganisms reproduce themselves and spread has given us many insights into the way in which the cells of our bodies function, **leading in turn to a better understanding of the whole organism and of how infective diseases may be prevented or cured.**

**Attendance**

While there is no formal requirement, attendance in the lecture is highly recommended. Lectures will include some information not included in the textbook. **You will need to be present to earn quiz points.** Earning a high grade in the class will be difficult, if not impossible, without regular attendance. **Information from lectures, films, or articles distributed in class are all "fair game" for exam questions**. If you miss a class period, **it is your responsibility to obtain notes from a fellow student.** Punctuality is encouraged; if late arrival is unavoidable, the student should enter the class in a manner that creates as little disruption as possible.

**Behavior in Lecture**

Class sizes for BIO 233 are quite large, and in order for everyone to hear the instructor and be able to ask questions (and hear the answers) there are some rules that must be followed.

1. All pagers, ipods, pdas, cell phones, iPADs and other bluetooth devices must be turned off or be silenced. Please remove ear buds.
2. Please do not talk while the instructor is speaking. Voices in large lecture rooms tend to carry great distances and can drown out the voice of the instructor. Those who sit in the back of the lecture room often have a particularly difficult time hearing the instructor. As a courtesy to your fellow classmates, please do not talk during the lecture.
3. Do not leave early. By signing up for BIO 233, you are entering into an agreement with the instructor and the other students in the class that you will stay for the full lecture period. **Leaving early creates distractions that prevents others from hearing the instructor and you may miss important information (e.g. quizzes and quiz announcements).**

Faculty/Student Responsibilities

1. As a college student, you are expected to schedule at least two hours of study time outside of class for **each** hour the class meets.
2. Each student is responsible for reading the text and **not** relying entirely on the instructor presenting every detail.
3. If help is needed in understanding course material, the student must show the attempted work when seeking help. Student is encouraged to contact the instructor during posted office hours or by special appointment. The instructor will try to respond to emails promptly, but please allow 48 hours for a reply as this is a very large class.
4. Any dishonesty involved with laboratory work or lecture exams will result in a grade of zero.
5. The student is expected to show good listening skills by focusing on the speaker and taking notes by restating in his/her words what is being said.
6. The student is expected to prepare for and take tests on schedule, and to keep a record of all grades to monitor progress (these will be posted on D2L).
7. The student is expected to exhibit a positive attitude by being considerate and polite, cooperating with the instructor and classmates to further their learning goals.

**Grading**

The lecture portion of this class is worth 600 pts. and the laboratory is worth 420 pts. **There will be three 100-point lecture exams and a 200-point comprehensive final exam.** The format of the exams will be multiple choice (scan tron). **In addition, there will be five lecture quizzes each worth 20 points.**

**GRADING**:

**A 100%-94% 4.00** \***Instructor reserves the right to adjust grades of**

A- 93%-88% 3.67  **the entire class if necessary (e.g. curve).**

B+ 87%-86% 3.33

B 85%-81% 3.00

B- 80%-78% 2.67

C+ 77%-76% 2.33

C 75%-71% 2.00

C- 70%-69% 1.67

D+ 68%-66% 1.33

D 65-63% 1.00

D- 62-60% 0.67

F <60% 0.00

**Study effectively and intelligently**. In other words, don’t cram! Plan your study sessions in advance and allow for enough time to adequately review the material. Form a study group with other students if that is an effective study technique for you. Study to understand rather than simply memorize. **The greatest hurtle for any student in a microbiology course is the new vocabulary/names of microbes that must be learned.** Repetition remains one of the more effective means of memorizing and understanding information, but it is important that you remember two key points. First, start early in the semester and study regularly. If you review continually and on a regular basis, then you will retain more information and improve your understanding. Second, take frequent breaks while studying. The human brain is not a sponge. We can only take in so much information at one time. After approximately 25 – 30 minutes take a break for about 10 minutes. Get up, stretch your legs and perhaps get a drink and then return to studying. Remember the key steps of **repeated review** and **short study intervals**.

**Academic Dishonesty**: Cheating on an exam, plagiarizing, or any other form of academic dishonesty will be dealt with in accordance with the current UWO Student Discipline Code. The instructor reserves the right to assign a grade of "F" for the course should circumstances warrant.

**Common courtesy:** Please turn off all cell phones, ipods, pdas, iPADs other bluetooth devices and pagers prior to class.  Please remove ear buds.