

# SYLLABUS

**CLARENDON COLLEGE**  
**Division of Science and Health**  
**Course Name:** *Microbiology*

**Credit Hours:** 4

**Semester:** *Fall 2010*  
**Classroom Location:** *Pampa Center*

**Instructor:** *David D. Lowrie*  
**Office Location:**  
**Phone:** *806-874-3488*  
**Email:** *david.lowried@clarendoncollege.edu*  
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**Other:** *Cell 662-1613*

**Office Hours:** Before and after regular lecture and lab meetings.

**Course Description:** The course is intended to be an introduction to the science of Microbiology, including free-living, as well as pathogenic microbes. Safe cultivation and control of bacteria is an integral part of course contents.

**Statement of Purpose:** *This course partially satisfies the laboratory science component of the core curriculum and is designed for transfer to a senior college or university.*

## **Required Instructional Materials:**

**Textbook:**  
*Nester, et.al., Microbiology; A human perspective. McGraw-Hill, New York, NY. 2009*

**Other Relevant Materials:** Materials for taking notes.

**Methods of Instruction:** Lecture including PowerPoint, Q&A, hands-on study of lecture topics in a laboratory setting.

## **Course Objectives**

Upon successful completion of Microbiology, the student should be able to...

- Provide the student with an introduction to the disciplines and fundamentals of microbiology.
- Provide an awareness of the intricate process of living organisms.
- Promote an understanding of the complexity of DNA & RNA and their role in cellular reproduction and protein synthesis respectively.
- Promote an understanding of genetics and heredity.
- Provide an understanding of evolutionary processes.
- Provide an awareness of the dynamic nature of plant and animal life & an appreciation for species diversity.

## **Grading Policies:**

The final semester grades will be figured as set in the current catalog:

90 to 100 = A      80 to 89 = B      70 to 79 = C      60 to 69 = D      Below 59 = F

**Comment.** The course grade will be calculated based upon the following: The average of at least 3 lecture exams amounting to 3/4<sup>th</sup> and laboratory performance amounting to 1/4<sup>th</sup> of final grade. At the discretion of the instructor students may be allowed to repeat an exam once to improve grade average. The final exam is excluded.

Final grade will be made available through Campus Connect at Clarendon College's website.

### **Classroom Policies:**

#### **Classroom Conduct**

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class and is cause for disciplinary action. Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit.

Disciplinary actions for cheating or disruption in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Students when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved.

Students who are reported as cheating to the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

#### **American with Disabilities Act Statement:**

Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Office of Student Services (806-874-3571 or 800-687-9737). We will work with you to make whatever accommodations we need to make.

#### **Dropping a Course:**

A student who is enrolled in a developmental course for TSI purposes may not drop his/her only developmental course unless the student completely withdraws from the college. A student may drop any other course with a grade of "W" any time after the census date for the semester and on or before the end of the 12<sup>th</sup> week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar. The request for permission to drop a course is initiated by the student by procuring a drop form from the Office of Student Services. (Refer to other policies concerning this issue in the current college catalog online.)

#### **Withdrawal from College:**

When a student finds it necessary to withdraw from school before the end of the semester, he or she should obtain a withdrawal form from the Office of Student Services. Students may also withdraw from the college by sending a written request for such action to the Registrar's Office. The request must include the student's signature, the student's current address, social security number and course information details. Students who withdraw after the census date for the semester and on or before the end of the 12<sup>th</sup> week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar will be assigned a grade of "W."

***Personal classroom policies:*** Academic integrity is expected. Cheating, plagiarism, or other dishonest acts will result in dismissal from class and a grade of "F" assigned for the course. Attendance at all lecture and lab sessions is mandatory. Late assignments and missed examinations may be submitted for a grade at the discretion of the instructor. Safety practices during lab work are an absolute must. There is no allowance for extra credit.

### **Tentative Course Schedule/Outline:**

- The Science of Biology
- History of Microbiology

- Cell types and their importance in Microbiology
- Cellular Anatomy of Eukaryotes and Prokaryotes
- Introduction to Molecular Biology
- Cellular Physiology
- Reproduction and Growth of Bacterial Populations
- Population Growth Curves
- Control of Microbial Growth
- Phenotypic Identification and Classification of Microbes
- Importance of bacterial genetics and genotypic Identification
- Human Immune Response
- Host-Microbe Interactions
- Epidemiology
- Common Infections of the Several Human Organ Systems
- Immunodeficiency

Topics may vary at the discretion of the instructor and will also be subject to time constraints.