Eastern WV Community & Technical College
Master Course Record

Course Prefix and Number: BIO 127

Course Title: Microbiology for Allied Health

Recommended Transcript Title: Microbiology for Allied Health

Date Approved/Revised 5-16-11

Credit Hours: 3
Contact hours per week (Based on 15 week term):
Lecture:
Lab:

Prerequisite: *BIO 124 and BIO 125, for nursing students formally admitted to the program.*
Corequisite:
Pre/Corequisite:

Grading Mode: Letter Grade

Catalog Description: A generalized laboratory course in microbiology related to nursing which stresses the importance of preventive techniques in the control of infectious diseases and allergic responses with less reliance being placed upon curative procedures. Preventive medicinal techniques include the understanding and implementation of aseptic techniques throughout the hospital and the education of the public and patients regarding the procedures used in preventing the spread of disease agents.

Course Outcomes: Students will be able to:

- Compare and contrast the characteristics for various microbes with regards to infections, treatment, and control. (This includes prions, viruses, bacteria, protozoans, and multicellular parasites.)
- Explain the dynamics of commensal, opportunistic, and pathological relationships particularly between microbes and humans.
- Evaluate and apply the proper methods of microbial control
- Describe microbial metabolic pathways in general terms and specifically evaluate the implications for food production and human disease.
- Summarize basic bacterial genetic principles and analyze consequences of mutation and genetic recombination.
- Apply the scientific method by stating a question; researching the topic; determining appropriate tests; performing tests; collecting, analyzing, and presenting data; and finally proposing new questions about the topic.
- Retrieve, evaluate, and use contemporary microbiologic information
- Exhibit oral and written communication competency through projects,
- Discuss the history of microbiology.

Implementation Cycle: Summer/Fall

Role in College Curriculum: (Check all that apply)
Ξ General Education Core Nursing
□ Technical Core (Specify Program)
□ Restricted Elective (Specify Program)
□ General Elective

Course Fee: Yes – 20.00
Instructor's Qualifications: Master's degree with a minimum of 18 credit hours in related science.
Expanded Course: Class lecture and discussion of application of the information are the main instructional procedures.

Prepared by: Debra Backus Reviewed by: Scott Hammer

Signature, Title	Date
Approved by: Per LOT Minutes	5-16-11
Dean, Academic Services	Date

Summer 2011 Introduction to Microbiology

Instructor: Scott Hammer
Course Time: 8:00am-3:00pm
Location: Rm 205
Email: hammers04@frontiernet.net

Course Description: Microbiology is intended to serve as a general microbiology class for science, health professions, and nursing majors. The class will emphasize bacteria with brief coverage of viruses and fungi, protozoa, virons and prions. Upon completion of this course, the student should have an understanding of the following: prokaryote structure and function; microbial growth, metabolism, and diversity; relationships between microorganisms and diseases; practical applications of microorganisms.

Beepers and Cellular Phones: Cellular phones and beepers **must be turned off** when in class unless there is an emergency. Cell phones must not be on your person during the taking of a quiz or test.

Attendance: College policy requires students to attend all classes and attendance will be taken. Only verifiable medical or legal excuses will be accepted as reasons for missing a test, otherwise, missed exams will count as zero. Where possible, prior permission for missing a test must be obtained from Mr. Hammer. This means that generally, no make-ups will be given.

Class Projects: Each students will be given two class projects to complete. A detail explanation of these projects will be presented by Mr. Hammer on the first day of class.

Tentative Lecture Schedule

Day 1: Introduction to the logistics of the class, Origin of Microbiology, Microscopy, Life Hypotheses, Origin of Life, Quest for Life, Taxonomy (chapters 1,2,3)

Day 2- Unit 1 Test, Cell Types, Prokaryotic Cells, Eukaryotic Cells, Molecules of Life, Basic Chemistry (chapters 4,5,6)

Day 3- Unit 2 Test, Chemistry continued, Life's compounds, DNA (chapters 7, 8, 9)

Day 4- Unit 3 Test, Viruses, Viroids (chapters 9,10,11)

Day 5 – Unit 4 Test, Prions, Protists and Fungi (chapters 12, 13, 14)

Day 6 – Unit 5 Test, Skin and WoundIinfections, Respiratory and Digestive Infections (chapters 15,16)

Day 7 – Unit 6 Test, Genitourinary and Nervous Infections, Blood and Lymphatic System (chapters 17,18)

Day 8 – Unit 7 Test, Food Microbiology, Environmental Microbiology,

Day 9 –Project #1 to be turned in and Project #2 power point presentations, final exam

Due to unforeseen happenings, it may be necessary for the course assignment schedule to be altered.