Course Prefix and Number: BIO 150  
Credits: 4

Course Title: Introductory Microbiology

Course Description: Studies the general characteristics of microorganisms. Emphasizes their relationships to individual and community health. Prerequisites: Completion of ENF 2, if required by placement test, and completion of MTE 1-3. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

General Course Purpose: This course emphasizes the application of microbial techniques to selected fields. It provides four credits of a laboratory science for the AS in Science - Science Specialization and satisfies the microbiology requirement for students interested in nursing, physician assistant, and dental hygiene programs.

Course Prerequisites and Co-requisites:  
Prerequisites: Completion of ENF 2, if required by placement test, and completion of MTE 1-3

Student Learning Outcomes:  
Upon completing the course, the student will be able to  
  a. Explain and demonstrate basic aseptic techniques;  
  b. Discuss principles of microbiology and culture of microbes;  
  c. Demonstrate culture of microbes in the laboratory;  
  d. Identify methods of microbial identification and apply them to identify an unknown microbe; and  
  e. Discuss applications of microbiology in biotechnology.

Major Topics to Be Included:  
  a. History of microbiology  
  b. Cell structure  
  c. Microbial metabolism  
  d. Microbial genetics  
  e. Immunology  
  f. Microbes and disease  
  g. Microbial ecology

Date Created/Updated (Month, Day, Year): January 22, 2019