COURSE NUMBER & TITLE: BIOL 1001: Introduction to Biology
CREDITS: 1 (Lecture 1 / Lab 0)
PREREQUISITES: None

CATALOG DESCRIPTION:
Introduction to Biology is an introduction to the basic characteristics, processes, and techniques common to the study of biological sciences. Major topics include: basic cell biology, the chemistry of life, genetics, human organ systems, and an introduction to laboratory techniques and research. This class is intended for anyone interested in future courses or currently taking a college biology course and students who are part of a health careers learning community.

OUTLINE OF MAJOR CONTENT AREAS:
1. Introduction to the science of biology
   A. Science and the scientific method
   B. Characteristics of life
   C. Future directions in biology
2. Chemistry of life
   A. Organic molecules
   B. Enzymes and reactions
   C. Energy and adenosine tri-phosphate (ATP)
   D. Deoxyribonucleic acid (DNA)
3. Cells
   A. Diversity of structure and function
   B. Chemical and electrical signaling
   C. Microorganisms and disease
4. Genetics
   A. Chromosomes and cell division
   B. Inheritance of traits
5. Physiology
   A. Circulation and Exchange
   B. Nutrition
   C. Control systems
6. Biotechnology and laboratory practice
   A. Research techniques
   B. Equipment and lab safety

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will outline and apply the steps of the scientific method, including creating a hypothesis.
2. Students will relate the science of chemistry to the study of biological systems.
3. Students will diagram basic cell parts and describe their functions.
4. Students will distinguish between different body systems and their roles.
5. Students will analyze and relate information about science in the media.

**MNTC GOALS AND COMPETENCIES MET:**
N/A

**HCC COMPETENCIES MET:**
Working Productively and Cooperatively
Communicating Clearly and Effectively
Thinking Creatively and Critically

**STUDENT CONTRIBUTIONS:**
Students are expected to attend all class sessions, participate in and contribute to class discussions, complete all assignments on time, and request assistance when needed. Attendance is critical for the successful completion of this course. Students must abide by all rules of laboratory safety, act in a responsible manner, and treat others with respect.

**STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.**

**ADDITIONAL INFORMATION:**
This course may involve exposure to harmful chemicals. Students will be supplied with pertinent information relating to this at the appropriate time.

Curriculum Committee Approval Date: February 5, 2018

AASC APPROVAL DATE: February 21, 2018
REVIEW DATE: February 2023