## Eastern WV Community & Technical College Master Course Record

**Course Prefix and Number: BIO 101** 

BIO 101L

Course Title: General Biology I Lecture

General Biology I Lab

Recommended Transcript Title: General Biology I Lecture

General Biology I Lab

**Date Approved/Revised:** 8/9/13; 9/16/13; 12/8/14; 9/2/16; 8/ 3/17, 8/21/17; 10/5/17

**Credit Hours:** BIO 101 3 credit hours

BIO 101L 1 credit hour

Contact hours per week (Based on 15-week term):

Lecture: 3 Lab: 2

**Prerequisite:** ENL 100 or minimum acceptable test scores for placement in college-level

English.

Corequisite: None Pre/Corequisite:

**Grading Mode:** Letter Grade

Catalog Description: This course will introduce concepts of cell structures, function, and reproduction. Common biochemical phenomena, particularly the metabolic processes of photosynthesis and cellular respiration, will be surveyed by the course. A description of the form and the function of DNA will be related to mechanisms of inheritance. The highlights of Darwin's theory of natural selection and other aspects of evolutionary theory will be explored.

BIO 101L – Lab application and demonstration of the concepts presented in BIO 101 General Biology I Lecture.

## **Course Outcomes:**

- 1. Perform the steps of the scientific method and communicate with precision, clarity, fluency, accuracy, and coherence through reading, writing, and oral communications.
- 2. Apply mathematical concepts appropriate to critically analyze and evaluate experimental data.
- 3. Apply biological knowledge and scientific principles to ethical concerns, civic engagement, and lifelong learning activities.
- 4. Examine the origins, organization, and requirements of life.
- 5. Relate concepts of chemistry to the components and processes of life.
- 6. Describe the components, functions, and processes of cells.
- 7. Differentiate between various methods of cellular division and reproduction.
- 8. Differentiate between various processes of attaining and using energy.
- 9. Explain the structures, processes, and functions of genetic material.

Course Number & Title: BIO 101 General Biology I and BIO 10IL General Biology Lab Date Prepared/Revised: 5/4/07, 12/11; 8/9/13; 12/8/14; 9/ 2/16; 8/3/17 Date Course Approved by Curriculum Committee: 9/2/17; 8/3/17; 10/5/17 Date Course Approved by LOT: 9/16/13; 12/15/14; 9/19/16, 8/21/17; 10/16/17

- 10. Explain processes of natural selection and biological evolution.
- 11. Recognize the link between science and technology, including the use of technology for learning, research, and communicating findings.

**Implementation Cycle:** Fall

Role in College Curriculum: (Check all that apply)

**E General Education Core:** Natural Science Lecture and Lab

**Restricted Elective (Specify Program)** 

Ξ General Elective
Workforce Education
Other (Please specify)

Course Fee: Yes, lab fee - \$20.00

**Instructor's Qualifications:** Qualifications: Master's degree in Science with a minimum of 18 hours graduate work in related science courses.

**Expanded Course Description**: Lecture, class discussion, and class participation will be the main instructional procedures for the lecture portion of this course. A two-hour lab will be conducted each week.

Prepared by: Deb H. Backus

Revised by: Amo Oliverio, Science Instructor, 8/3/17

Approved Per LOT Minutes:

Dean, Teaching and Learning Date