

**SEWARD COUNTY COMMUNITY COLLEGE  
COURSE SYLLABUS**

**I. TITLE OF COURSE: BI1515 - Biology II for Majors**

**II. COURSE DESCRIPTION: 5 credit hours  
3 credit hours of lecture and 2 credit hours of lab per week.**

This course focuses on the structure and function of organisms with an emphasis on phylogeny. The unifying principles for this course are: 1) Biodiversity, 2) Evolutionary relationships, 3) Form and function of organisms, 4) Interaction, interdependence, and sustainability 5) Genetic continuity and reproduction. Inquiry oriented investigations will be used to introduce, explore, and expand on concepts discussed in the classroom. For each unit of lecture credit, a minimum of three hours per week with one of the hours for class and two hours for studying/preparation outside of class is expected.

Pre-requisite:

Refer to placement matrix.

**III. PROGRAM AND/OR DEPARTMENT MISSION STATEMENT:**

The Science Program at Seward County Community College provides opportunities to improve and enhance each student's understanding and comprehension of the natural world through a variety of courses and experiences to develop a scientifically literate citizen.

**IV. TEXTBOOK AND MATERIALS:**

This is an e-book that will be purchased online after class starts:

Biology: Concepts and Investigation (Hoefnagels, 5<sup>th</sup> ed.) Mc Graw-Hill  
Connect

**V. SCCC OUTCOMES:**

- 1: Read with comprehension, be critical of what they read, and apply knowledge gained to real life
- 2: Communicate ideas clearly and proficiently in writing, appropriately adjusting content and arrangement for varying audiences, purposes, and situations.
- 3: Communicate their ideas clearly and proficiently in speaking, appropriately adjusting content and arrangement for varying audiences, purposes, and situations.
- 4: Demonstrate mathematical skills using a variety of techniques and technologies.
- 5: Demonstrate the ability to think critically by gathering facts, generating insights, analyzing data, and evaluating information
- 6: Exhibit skills in information and technological literacy
- 7: Understand each other, moving beyond simple acceptance to embracing and celebrating the rich dimensions of diversity by working as a team to learn, engaging with community, exhibiting cultural awareness, and creating equity.

**VI. COURSE OUTCOMES:**

1. Summarize and explain the processes and mechanisms of evolution
2. Interpret organismal diversity using phylogenetic hypotheses
3. Relate structure to function in organisms
4. Explain how organisms interact with their environments
5. Design and perform experiments

**VII. COURSE OUTLINE:**

1. The process of science
2. Evolutionary history and the classification of life
3. Ecology and sustainability
4. Prokaryotes - diversity, classification, structure, and function
5. Protists - diversity, classification, structure, and function
6. Fungi - diversity, classification, structure, and function
7. Plants - diversity, classification, structure, and function
8. Animals - diversity, classification, structure and function

**VIII. INSTRUCTIONAL METHODS:**

1. Lecture and discussion
2. Laboratory experiments, activities, and reports
3. Use of biology software
4. Demonstrations

**IX. INSTRUCTIONAL AND RESOURCE MATERIALS:**

1. Computer simulations
2. Microscopes and slides
3. Models
4. Outdoor classroom
5. eBook and on-line resources

**X. METHODS OF ASSESSMENT:**

SCCC Outcome #1 will be assessed using class discussions, tests, and reports  
SCCC Outcome #2 will be assessed using quizzes, exams, and reports  
SCCC Outcome #3 will be assessed using class discussions and presentations  
SCCC Outcome #4 will be assessed using quizzes and lab reports  
SCCC Outcome #5 will be assessed using reports and lab activities  
SCCC Outcome #6 will be assessed using tests, reports, and lab activities

SCCC Outcome #7 will be assessed based on group work

**XI. ADA STATEMENT:**

Under the Americans with Disabilities Act, Seward County Community College will make reasonable accommodations for students with documented disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations. Students should identify themselves to the Dean of Students at 620-417-1106 or going to the Student Success Center in the Hobble Academic building, room 149 A.

**XII. CORE OUTCOMES PROJECT:**

The learning outcomes and competencies detailed in this course outline or syllabus meet, or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups project for this course as approved by the Kansas Board of Regents  
KRSN: BIO1030

Syllabus Reviewed: 5/16/2022