

**SEWARD COUNTY COMMUNITY COLLEGE
COURSE SYLLABUS**

I. TITLE OF COURSE: BI1015- Directed Independent Studies in Biology

II. COURSE DESCRIPTION: 1-5 credit hours
1-5 credit hours of lecture and 1-5 credit hours of lab per week.

Projects in Biological Science is an independent or small group study for students to investigate topics of biological science outside the regular curriculum offering.

For each unit of 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: A strong high school biology background, or instructor approval.

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 experience to develop a scientifically literate citizen.

IV. TEXTBOOK AND MATERIALS:

Appropriate materials will be chosen to fit the topics of study. These may include numerous library sources, equipment, or other materials.

V. SCCC OUTCOMES

Students who successfully complete this course will demonstrate the ability to do the following 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

VI. COURSE OUTCOMES:

- Outcome #1- Scientific literacy and critical reading.
- Outcome #2- Demonstrate an understanding of scientific research including the validity of information and research.
- Outcome#3- Demonstrate an understanding of experimental design, collecting and analyzing data.
- Outcome#4- Capable of writing a research proposal.
- Outcome #5- Students will be certified vis CITI training in an introduction of the scientific process.
- Outcome#6- Utilize technologies to conduct literature review and research.

VII. COURSE OUTLINE:

An individual plan of study will be outlined in detail by the student and instructor itemizing learning objectives, basic sources of material, observations and experiments and evaluation criteria.

VIII. INSTRUCTIONAL METHODS:

Although this is an independent study, several students will be involved in the study at a time and contributing to the total education outcome.

IX. INSTRUCTIONAL AND RESOURCE MATERIALS:

Materials and equipment will be individualized to fit the topic of study.

X. METHODS OF ASSESSMENT:

SCCC Outcome #1 will be assessed and measured by class participation, written exams, and critical analysis of class assignments.

SCCC Outcome #2 will be assessed and measured by class and laboratory research interaction and communication, written exams and critical analysis of class assignments.

SCCC Outcome #3 will be assessed and measured through mathematical analysis of class and laboratory research results through content specific applications.

SCCC Outcome #4 will be assessed and measured by class participation, written exams, projects and laboratory activities.

SCCC Outcome #5 will be assessed and measured by written exams, laboratory activities, and research project.

SCCC Outcome #6 will be assessed and measured by students using computers for instruction and analysis instrumentation of class activity in the laboratory.

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 Hobbie Academic building, room 149 A.

Syllabus Reviewed: 5/19/2021