

COURSE SYLLABUS

PO Box 1189 1042 W. Hamlet Avenue Hamlet, NC 28345 (910) 410-1700 www.richmondcc.edu

COURSE: BIO 140A ENVIRONMENTAL BIOLOGY LAB

HOURS: Lecture: <u>0</u> Lab/Shop: <u>3</u> Work Exp/Clinical: <u>0</u> Credits: <u>1</u>

COURSE DESCRIPTION:

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues.

Note: In accordance with the Comprehensive Articulation Agreement, this course has been approved to satisfy the general education requirement for natural sciences in A.A., A.S., and A.A.S. degree programs.

PREREQUISITE(S): None

COREQUISITE(S): BIO 140

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

No textbook required.

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, the student will be able to:

- 1. Calculate relative density & relative frequency for a given population.
- 2. Determine the niche breadth and niche overlap of species within different environments.
- 3. Graph a survival curve for a given population.
- 4. Utilize current water quality testing procedures.
- 5. Diagram the flow of wastewater through a water treatment plant.
- 6. Identify materials that are recyclable and diagram the layers of a modern day landfill.
- 7. Identify ecological communities in the local area and identify the principal plant and animal species characteristic of these communities.
- 8. Identify the soil horizons from a given soil sample, classify the texture of the soil and analyze its nutrient content.
- 9. Identify invasive nonnative species and determine their niche here and in their country of origin.

***Please refer to the online version of the Richmond Community College Program & Course Catalog and the Student Handbook for current academic and general information.