THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE
FACULTY SENATE

Senate Document Number 5816S
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Statement of Faculty Senate Action:

APC Document 48: Revise the course descriptions for BIOL 339, 344, 360, 423, 480 and 499

Effective Date: Fall 2016

1. Delete: On page 95, the entry for **BIOL 339:**

339 Microbiology (4)
Class and laboratory provide an introduction to structure, physiology, metabolism and identification of some of the more important microorganisms. Prerequisites: BIOL 116; CHEM 132. Spring.

Add: On page 95, in place of deleted entry:

339 Microbiology (4)
Study of the genetics, physiology, pathogenicity, and ecology of bacteria, viruses, and fungi, with emphasis on the impact of these organisms on the environment and on human health. Upon completion of the laboratory, students should be able to demonstrate skills including microscopy, aseptic technique, microbial identification and various molecular techniques. Prerequisites: BIOL 136 and CHEM 132; BIOL 211 or CHEM 231. Spring.

2. Delete: On page 95, the entry for **BIOL 344:**

344 Cell Biology (4)
Class and laboratory study of cells as the fundamental units of life emphasizing the relationship between ultrastructure and function. Prerequisites: BIOL 116; CHEM 132. Fall.

Add: On page 95, in place of deleted entry:

344 Cell Biology (4)
Lecture and laboratory study of cellular architecture and function, with emphasis on protein synthesis, trafficking, structure, and membrane topology, cell division mechanisms, cell communication, and cancer biology. Experimental approaches for isolating, characterizing, and manipulating organelles, genes, and proteins will be discussed and utilized in laboratory procedures. Prerequisites: BIOL 136 and CHEM 132; BIOL 211 or CHEM 231. Fall.

3. Delete: On page 96, the entry for **BIOL 360:**

360 Animal Behavior (4)
Current evolutionary models are used to discuss the significance of animal behavior in relation to ecology. Provides underlying theory along with examples to illustrate key

concepts in behavior. Laboratory exposes students to methodology of behavioral research. Prerequisites: BIOL 115, 210. Spring.

Add: On page 96, in place of deleted entry:

360 Animal Behavior (4)
Current evolutionary models are used to investigate the significance of animal behavior in relation to ecology. Proximate mechanisms of behavior are also explored. Provides underlying theory along with examples that illustrate key concepts in behavior. Laboratory exposes students to methodology of behavioral research. Prerequisites: BIOL 134, 135, 210. Spring.

4. Delete: On page 96, the entry for **BIOL 423:**

423 Molecular Biology (3)
Study of living organisms and their properties resulting from the structure, function, and interrelationships of their macromolecules. Prerequisites: BIOL 116; CHEM 231. Odd years Fall.

Add: On page 96, in place of deleted entry:

423 Molecular Biology (3)
Study of nucleic acid structure and function, chromosomal architecture, and mechanisms of gene expression including the function of proteins and non-coding RNA molecules in regulating these processes. Prerequisites: BIOL 136; CHEM 231. Fall.

5. Delete: On page 97, the entry for **BIOL 480:**

480 Senior Seminar (3)
Students will apply biology theory and knowledge during the presentation and discussion of diverse topics chosen by the instructor. Demonstration of oral competency is a strong component of the course. Open to Biology majors of senior standing. Fall and Spring.

Add: On page 97, in place of deleted entry:

480 Senior Seminar (3)
Capstone course for the Biology major. Students will apply biology theory and knowledge during the presentation and discussion of diverse topics chosen by the instructor. A grade of C or higher is required for demonstration of major competency, and written competency, and oral competency. Prerequisites BIOL 134, 135, 136, 210, 211; 8 hours of Chemistry and senior standing. Fall and Spring.

6. Delete: On page 97, the entry for **BIOL 499:**

499 Laboratory Assistantship in Biology (2)
Guided teaching experience in a laboratory setting. Under the direct supervision of a faculty member, the student will assist beginning students in an introductory biology laboratory. Students will present explanatory material to the class and will assist in preparation and operation of laboratory material and lab quizzes and practical examinations. Open to junior and senior biology majors who have a GPA of 3.0 or better. Will not count toward biology electives. May be repeated once, in conjunction

with a different course. Departmental approval required. (Grading: S/U) Fall and Spring.

Add: On page 97, in place of deleted entry:

499 Laboratory Assistantship in Biology (2)
Guided teaching experience in a laboratory setting. Under the direct supervision of a faculty member, the student will assist a faculty member with the delivery of a biology laboratory. Students may present explanatory material to the class, assist in preparation of the lab, help with operation of equipment, and assist with lab quizzes and practical examinations. Open to junior and senior biology majors who have a GPA of 3.0 or better. Will not count toward biology electives. May be repeated once. Departmental approval required. (Grading: S/U) Fall and Spring.

Impact: Since BIOL 339 is no longer a requirement for pre-health majors, there may be a slight reduction in the number of students taking that course.

Rationale: Changes in the course descriptions more accurately convey the content and focus of these classes. Changes to prerequisite listings reflect the changes to the major, and enable upper level classes to reliably build upon content offered at the lower level. Progress through the major will be more directed and sequential.