THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE FACULTY SENATE

Senate Document Number	<u>5416S</u>
Date of Senate Approval	<u>2/11/16</u>
Statement of Faculty Senate A	Action:

APC Document 44: Add course, BIOL 134, Experimental Design, Analysis and Presentation

Effective Date: Fall 2016

1. Add: On page 93, entry for new course, BIOL 134:

134 Experimental Design, Analysis and Presentation (3)

An introduction into process and methodology in biological sciences, including fundamental concepts of biological research. The course includes 1) information techniques and critical evaluation of primary literature in biology; 2) scientific writing including ethics and presentation; and 3) experimental design and statistical analysis. Fall and Spring.

Impact Statement: BIOL 134 will be a required class in the biology curriculum, and will increase our introductory core of 100-200 level classes by 2 contact hours (from 16 to 18). This small increase is more than offset by a 4-hour reduction in cognate classes (eliminating STAT 185 as a requirement) and an 8-hour reduction in required coursework in biology at the 300-level. Faculty from the biology department will be made available to teach this course by eliminating the lab component of BIOL 115. Our student credit hour per faculty contact hour ratio will increase. There will be a reduction in enrollment in STAT 185 from Biology majors, although students, particularly those interested in pursuing post-graduate education, will still be encouraged to take this class.

Rationale: Fundamentally, this course will help our students be better prepared for further study. Students will better understand the importance of scientific methodology and information techniques critical for success. Students will be better prepared for higher level classes, such as BIOL 211 (Botany) and 300-level electives, especially those listed under the Critical Thinking and Quantitative group. A problem that we consistently have is that transfer students are unprepared for our major. This class will still allow students to receive credit for their transfer classes, but will afford us the opportunity to re-emphasize and build the skills they will need to be successful at UNCA. This class will help all Biology majors to have an equivalent base of knowledge and preparation for upper level courses. The skills introduced in this class will be reinforced and built-upon by our other classes.