EXECUTIVE ACTION REQUEST

EA-COS-18-10
Effective Fall 2018

TO: **Dr. David Boggs, CGS Chair**
FROM: **Dr. Douglas Klarup, COS Interim Dean**
DATE: **February 5, 2018**
RE: **Executive Action Taken at the College of Sciences Curriculum Committee Meeting on February 2, 2018**

The following request was approved by executive action at the College of Sciences Curriculum Committee meeting on February 2, 2018. The request would be effective Fall 2018. I ask that similar action be taken at the Council on Graduate Studies.

Request:
Change the format of BIO 4750 Statistical Analysis of Scientific Data from the current 2-2-3 format to a 3-2-4 format (adding one hour of lecture per week) .

Rationale for change:
This class is currently taken as an alternative to MAT2250G Elementary Statistics to fulfill the statistics requirements in the B.S. degree in Biological Sciences. The current 2 hours of lecture per week does not allow does not provide adequate time to teach the techniques that are utilized in the laboratory component. What is missing is a way to engage the students in issues of statistical issues in a way that will bring the concepts home and move beyond memorization. With the additional hour, incorporate of weekly engagement activities can be applied to explore methods to use statistics to understand biology. Topics would include such things as understanding variation in biology, issues of statistical dishonesty, data repositories, and experimental design.

Effective Year/Term:
Fall 2018

Current Course Desription

BIO 4750 - Statistical Analysis of Scientific Data. (2-2-3) Methods of quantitative analysis of biological data at the population level. Emphasis placed on practical applications of statistical analysis. Credits: Prerequisites & Notes College algebra or permission of instructor.
3.000 Credit hours

Requested Modification

BIO 4750 - Statistical Analysis of Scientific Data. ~~(2-2-3)~~ (3-2-4) Methods of quantitative analysis of biological data at the population level. Emphasis placed on practical applications of statistical analysis. Credits: ~~3~~ 4 Prerequisites & Notes College algebra or permission of instructor.
~~3.000~~ 4.000 Credit hours