University of Wisconsin-Whitewater

Curriculum Proposal Form #4R

# **Change in or Deletion of an Existing Course**

Type of Action (check all that apply)

Pre-requisite Change

Add Cross-listing \*  Technological Literacy

Course Deletion  Title Change   
 Number Change  Writing Requirement

(other) Change in Course Description

**Effective Term**:

**Current Course Number** (*subject area and 3-digit course number)*: BIOLOGY 303   
**Cross-listing *(if applicable)***:

**New Course Number** (*subject area and 3-digit course number*):

**Cross-listing *(if applicable)***:

**\*If adding a cross-listing, include the following:**

Required in the major:   
  
Required in the minor:

Number of credits: Lab hours/week:    
  
Contact hours/week: Repeatable

**Current Course Title**: Planning and Presenting Biological Research

**New Course Title**: **Biostatistics**

**25-Character Abbreviation** *(if new title)*:

**Sponsor(s)**: Ellen Davis & Bruce Eshelman

**Department(s):** Biological Sciences

**College(s):**

**List all programs that are affected by this change:**

none

If programs are listed above, will this change affect the Catalog and Advising Reports for those programs? If so, have Form 2's been submitted for each of those programs?

(Form 2 is necessary to provide updates to the Catalog and Advising Reports)

NA  Yes  They will be submitted in the future

Proposal Information: ([***Procedures for form #4R***](http://acadaff.uww.edu/UCC/Curriculum_Handbook_09/Procedures_form4R.docx))

1. **Detailed explanation of changes** (use FROM/TO format)

***FROM:***

***Title change – Planning and Presenting Biological Research***

***Course description change:*** Students will learn fundamentals of hypothesis formation and testing,experimental design, and to evaluate research methodologies publishedin the biological literature. Students will write about their own research,and become familiar with the standards for publication of research results.Critical analysis of quantitative methods in biology. Recommended for theEcology and Field Biology emphasis; strongly encouraged for Cell Biologyand Physiology emphasis.

***Writing Requirement:***  *Completion of this course currently satisfies the departmental writing requirement.*

***TO:***

***Title change: Biostatistics***

***Course description change:*** Students will learn fundamentals of hypothesis formation and testing using a variety of univariate statistical methods. Consideration of experimental design and the evaluation of research methodologies publishedin the biological literature are explored in detail. Students will write about their own research,and become familiar with the standards for publication of research results.

***Writing Requirement:***  *Department is removing this course as a means for students to satisfy the departmental writing requirement.*

## Justification for action

**Title Change**: At its core, this course is a statistics course, and as such, satisfies the statistical requirement for entrance to medical school, veterinary school, graduate school, etc. However, the current name of the course obscures the longtime emphasis on statistics. Students and post-baccalaureate programs alike are often confused by the name, and the department frequently fields questions of clarification. The name change should obviate the need for such inquiries.

**Course Description change:** As with the title change, the change in the course description does not reflect any change in the course content itself, but merely makes the statistical emphasis of the course more transparent. For example, “… hypothesis formation and testing, and experimental design…” are key components of statistical analysis, but a person without a statistical background may not be aware of that.

**Writing Requirement:** Although students do write in this course, writing instruction per se is not an integral part of this course. The Biology department is moving toward a more comprehensive approach to writing within the major in the hopes of helping our students achieve a higher level of writing proficiency. The proposed removal of this course as a means for students to satisfy the departmental writing requirement is one component of these changes.