Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

**SLO 1: Fundamental concepts**
Acquire fundamental concepts in the fields of organismal biology, evolutionary biology, genetics, and ecology.

**Related Measures**

**M 1: SALG survey instrument**
Students will complete the SALG survey instrument (www.salgsite.org) after completing BIOS 1071.

Source of Evidence: Academic indirect indicator of learning - other

**Connected Documents**
- Bios 1071
- SALG survey for Bios 1071 Fall 2014
- Summary of 1071 SALG results

**Target:**
80% of students will self-report learning gains of "good" or better in key concept/content areas (e.g., evolution).

**SLO 2: Adjustment to the university learning environment**
Achieve satisfactory adjustment to the university learning environment.

**Related Measures**

**M 1: SALG survey instrument**
Students will complete the SALG survey instrument (www.salgsite.org) after completing BIOS 1071.

Source of Evidence: Academic indirect indicator of learning - other

**Connected Documents**
- Bios 1071
- SALG survey for Bios 1071 Fall 2014
- Summary of 1071 SALG results

**Target:**
80% of students will report gains of "good" or better in attitudinal areas (confidence, enthusiasm)

**Connected Document**
- Bios 1071

**SLO 3: Cellular and molecular biology**
Learn core concepts of cellular and molecular biology

**Related Measures**

**M 2: Pre/post test**
Pre- and post-course testing in BIOS 2114 using the IMAC Cell and Molecular Biology instrument (Shi, J et al 2010. CBE-Life Sciences Education 9: 453-461.)

Source of Evidence: Faculty pre-test / post-test of knowledge mastery

**Connected Documents**
- 2114 Fall 2014 pre-post test data
- Analysis of Pre-Post test data
- Bios 2114 Student survey SALG Fall 2014
- We surveyed Bios 2114 students

**Target:**
Each class tested will achieve a normalized learning gain of 50% or higher for the semester.

**SLO 4: Mastery of advanced concepts**
Attain broad mastery of advanced concepts across the breadth of topics and levels of organization in the biological sciences

**Relevant Associations:**

**Related Measures**

**M 3: ETS Major Field Test**
All students will take the ETS Major Field Test in Biology during their senior year.

Source of Evidence: Standardized test of subject matter knowledge

**Connected Documents**
- ETS item analysis for 2012-2013 cohort
- Fall 2014 Action Plan for MFT results
- Major Field Test Assessment Summary Spring 2014 and 2014 Fall
- Major Field Test Scores and Analysis

**Target:**
Mean overall score each semester will rank above the aggregated mean score of current test cohorts from UNO peer institutions.