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

**SLO 1: Independent research**
Be able to present effective oral and visual summaries of independent research.

**Related Measures**

**M 1: Annual presentation**
Annual presentation of independent research during “Works in Progress Seminars”.
Source of Evidence: Presentation, either individual or group

**Target:**
70% will score “good” or above on a departmentally approved scoring rubric once a year.

**SLO 2: Present thesis - General audience**
Orally present a thesis to a general scientific audience.

**Related Measures**

**M 2: Departmental seminar**
Presentation of a thesis in the form of a departmental seminar.
Source of Evidence: Presentation, either individual or group

**Connected Document**
WIPs results for MS students

**Target:**
70% will score “good” or above on a departmentally approved scoring rubric.

**SLO 3: Present thesis - Specialized audience**
Present and defend a written thesis to a specialized audience.

**Related Measures**

**M 3: Student's advisory committee**
Successfully defend a written thesis to the student's advisory committee.
Source of Evidence: Senior thesis or culminating major project

**Target:**
70% will score “good” or above on a departmentally approved scoring rubric during the closed defense of the thesis.

**SLO 4: Specific area of biology**
Learn and apply concepts and experimental approaches in a specific area of biology appropriate to the student's interests.

**Related Measures**

**M 4: Completion and defense of a thesis**
Completion and defense of a thesis in an area of the biological sciences appropriate to the student's interest.
Source of Evidence: Academic direct measure of learning - other

**Target:**
70% of enrolled students will successfully defend a thesis within 2.5 years of entering the program.