ASSESSMENT PLAN

Natural Sciences: Biology **M.S.**
(Instructional Degree Program) (Degree Level)

Program Mission:
The mission of the Biology program is to provide undergraduate and graduate students with a high quality science education that includes experience with a research and field projects. The program provides a scientific and technical background that empowers students to successfully pursue science and technology careers, or, proceed on to advanced graduate studies.

Student Learning Outcome 1:

Have mastery of principle biological knowledge.

NMHU Traits Specifically Linked to Student Learning Outcome 1

- Mastery of Content Knowledge and Skills
- Effective Communication Skills
- Critical and Reflective Thinking Skills

First Means of Assessment for Outcome 1:
Course grades and evaluations; successful students will receive an average grade of "B" or better on class tests and/or projects in Biol 620 (Fall 2015) and Biol 610 (Spring 2016).

Second Means of Assessment for Outcome 1:
The general knowledge component of the thesis or project defense will be used as the assessment tool. Measure of success – 80% or more of our students will successfully meet our criteria.

Student Learning Outcome 2:

Utilize scientific methodology and technology through which biological knowledge accumulates.

NMHU Traits Specifically Linked to Student Learning Outcome 2

- Effective Use of Technology

First Means of Assessment for Outcome 2:

Successful students will write an acceptable thesis proposal or project proposal and successfullly defend it (B or better) in Biology 600 (Research Methods, Fall 2015).

Second Means of Assessment for Outcome 2:

Course grades and evaluations of laboratory courses; Successful students will receive an average grade a "B" or better on laboratory reports and exams which include designing and carrying out experiments. Measure of success – 80% or more of our students will successfully meet our criteria. (Biol 585 and Biol 523 Spring 2016).

Student Learning Outcome 3:

Be able to critically analyze information and effectively impart biological knowledge with peers, mentors, and other professionals in the scientific community.

NMHU Traits Specifically Linked to Student Learning Outcome 3

- Mastery of Content Knowledge and Skills
- Effective Communication Skills
- Critical and Reflective Thinking Skills

First Means of Assessment for Outcome 3:

Thesis (or Project) and Defense; Successful students will write an acceptable thesis and pass their thesis defense.

Second Means of Assessment for Outcome 3:

Graduate Seminar-successful students will receive a "B" or better in the seminar Biol 650

Third Means of Assessment for Outcome 3:

Course grades and evaluations for courses other than graduate seminar, particularly for courses involving written and oral reports; Successful students will receive an average grade of "B" or better for written and oral reports presented during these courses. Measure of success – 80% or more of our students will successfully meet our criteria. Biol 577, Biol 523, and Biol 585 (Spring 2016).

Student Learning Outcome 4:

Receive a comprehensive science background essential to advance to a doctoral program and/or career in biology or related fields.

NMHU Traits Specifically Linked to Student Learning Outcome 4

- Mastery of Content Knowledge and Skills
- Effective Use of Technology

First Means of Assessment for Outcome 4:

Tracking students receiving Master's Degrees in the program in the program using faculty knowledge. Measure of success - 75% of respondents indicating continuing their education or employed in biology or related area. 75% of the respondents will indicate that they are satisfied or very satisfied with their preparation for work or graduate school.

Utilization of Results:

Changes to Program Based on Results:

Retention Strategies: