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

**SLO 1: Advanced concepts**
Acquire advanced concepts in classical mechanics, electricity and magnetism, quantum mechanics and thermodynamics.

**Related Measures**

**M 1: ETS Major Field Test**
All students will take the ETS Major Field Test in Physics during their senior year.

Source of Evidence: Standardized test of subject matter knowledge

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

**SLO 2: Communicate scientific knowledge**
Be able to communicate knowledge of physics theory and application in oral and written form.

**Related Measures**

**M 2: Student report**
Student report from seminar course and research experiences.

Source of Evidence: Academic direct measure of learning - other

**Target:**
Mean overall score will rank above the aggregated mean score of current test cohorts from UNO peer institutions for the "Advanced Physics" subscore.

**SLO 3: Research & analysis**
Be able to effectively conduct experimental or computational research including data acquisition and analysis

**Related Measures**

**M 3: Research Reports**
Final reports from advanced laboratory and research courses evaluated by the faculty member teaching the course.

Source of Evidence: Academic direct measure of learning - other

**Target:**
All students will score acceptable on each section of the grading rubric.