General Science Program Assessment Plan

Learning Outcomes

General Science is different from traditional majors in that it pulls coursework from multiple STEM departments to provide students with a self-guided interdisciplinary education. Unlike many STEM majors, most GS students add the major during their junior or senior year. Assessment models that rely on learning outcomes based on the content of specific coursework and subdivided into yearly educational benchmarks are therefore not appropriate for the General Science Program. Instead, the GS program outcomes are tied to its structure, which is designed to:

• Provide students with interdisciplinary curricular choices that develop competencies important for all STEM fields.
• Emphasize and develop skillsets commonly sought by employers.
• Address expectations of students entering the General Science Program, for example timely degree completion.

Through completing a General Science major students will be able to:

Understand the methodology of science and recognize its limitations.

Identify connections between STEM disciplines to build foundational interdisciplinary knowledge.

Apply mathematics and modeling to the analysis and interpretation of quantitative information.

Communicate knowledge, ideas, and reasoning clearly, effectively, and objectively in both written and oral forms.

Become an actively engaged team member through participation in collaborative work.

Plan, organize and prioritize time and coursework for meaningful and timely degree completion.

Plan to collect information

GS students will be given a mandatory survey during their last term, in which they will be asked to evaluate their GS coursework for fit within each of the program outcomes. The data from this survey will shed light on which courses, and course sequences, are perceived by students to provide the competencies tied to each outcome. This will serve as means of program
assessment as well as allow students to reflect on how their coursework provides the skills commonly sought by employers.

The GS Director collects cumulative GPA information on all graduating GS students each term. This information is compared to other STEM departments. It is important to note that GPA based assessment is not the best metric for GS program success as many student are prompted to switch to GS because they are struggling in a traditional STEM major. The switch allows many of these students to complete their degree despite their previous struggles. For these student a low final GPA is not indicative of problems in the GS program.

Assessment for the pre-professional tracks (Med, Pharm, Dent and Science Education) will include yearly conversations with units on campus who are familiar with prerequisite courses for the professional schools that GS students will be applying to. Modifications to the curriculum will be made based on these conversations to ensure that the program continues to guide students through the appropriate coursework.

Analyzing and discussing information gathered

Data collected through the processes outlined above will be complied and evaluated by the General Science program Director, who will make recommendations to the General Science Advisory committee regarding sensible programmatic changes.

Process for curricular revisions

Curricular revisions in the GS program take the form of changes to the approved course lists instead of modifications of course content. These revisions will be made in consultation with the General Science Advisory Committee as well as appropriate advising and academic units for each track (Health Professions Program, UO Teach Program). The Advisory Committee meets at least once a year in order to hear a report from the GS Director about the status of the program and students and to discuss possible adjustments to the curriculum. The Director will present proposed changes to the appropriate oversight bodies (undergraduate council).