

Exploring the Physical and Life Sciences

Summary Statement

This assessment design ensures that both *Exploring the Physical Sciences* and *Exploring the Life Sciences*:

1. assess a shared General Education student learning outcome (GE SLO) through discipline-appropriate methods and provide a basis for determining whether the SLO should remain shared or be revised;
2. employ embedded, authentic assessment practices;
3. support faculty-driven continuous improvement; and
4. align with expectations for educational effectiveness and accreditation review.

Exploring the Physical Sciences

Participating courses

CHM-004: Stephanie Cowell

PHS-114: Alan Nishimura

PHY-013: Jennifer Gee

PHY-023: Robert Haring-Kaye

Purpose of Assessment

Assessment in the Exploring the Physical Sciences GE area evaluates students' understanding of foundational principles of matter and physical systems, their ability to explain and apply the scientific method, and their capacity to reflect on the relationship between science, faith, and broader societal issues.

Direct Assessment Methods

Courses approved for this GE area will **Embedded Exam or Quiz Items**

Assessment Cycle and Use of Results

- Assessment conducted across GE-certified Physics and Chemistry courses.
- Results reviewed by the General Education Committee in consultation with Physics and Chemistry faculty.
- Findings used to:
 - strengthen emphasis on scientific method as inquiry rather than content recall;
 - ensure appropriate integration of liberal arts reflection in introductory science courses;
 - support curricular refinement and pedagogical improvement.

II. Exploring the Life Sciences

Participating courses

BIO-005 (two sections): Nicole Marsh

BIO-011: Alyse Wallace

BIO-012: Isaac Gomes

KNS-011: Alyse Wallace

KNS-012: Isaac Gomes

LS-012: Beth Horvath

PSY-001: Smaranda Lawrie

PSY-001: Carmel Saad

Purpose of Assessment

Assessment in the Exploring the Life Sciences GE area evaluates students' understanding of living systems, investigative approaches in the life sciences, and the strengths and limitations of scientific models, including their interdisciplinary and theological implications.

Direct Assessment Methods

Courses approved for this GE area will **Embedded Exam or Quiz Items**

Assessment Cycle and Use of Results

- Assessment conducted across GE-certified Biology, Kinesiology and Psychology courses.
- Results reviewed by the General Education Committee in consultation with Biology, kinesiology, and Psychology faculty.
- Findings used to:
 - improve alignment between course-level assignments and GE expectations;
 - ensure balanced attention to scientific methods, limitations, and broader implications;
 - guide ongoing curricular and pedagogical refinement.