Departmental Mission

The Geology Department is an undergraduate program offering majors in geology and environmental geology.

Learning Outcomes

The Geology Department has selected a set of assessment outcomes that map into the University-wide Learning Outcomes from *Habits of Inquiry and Reflection* as indicated below:

1. Scholarship: All undergraduates will develop and demonstrate advanced habits of academic inquiry and creativity through the production of a body of artistic, scholarly or community-based work intended for public presentation and defense.

*Geology Department Outcomes:*
- Graduates will demonstrate research skills relevant to their careers.
- Graduates will be adequately prepared for graduate school.

*Measures to be utilized:*
- At least 2/3 of graduating students will complete at least 4.0 credit hours of GEO495: Senior Thesis, GEO 477/478: Honors Thesis, or GEO404: Problems in Geology with a substantive written report and oral presentation of results to the campus community.
- On the Annual Survey of Exiting Students, over 2/3 of graduates will “agree” or “strongly agree” with the statement, “As an undergraduate in the Geology Department of the University of Dayton I believe I am adequately prepared for graduate school.”
- On a Post-graduate Survey of alumni to be administered three years after graduation, at least 60% of students will have completed or be currently enrolled in graduate or advanced professional degree programs. In addition, at least 75% of students who have continued to post-graduate study will AGREE or STRONGLY AGREE with the statement, “I believe that my undergraduate experience at the University of Dayton adequately prepared me to succeed in my post-graduate studies.”
2. **Faith traditions**: All undergraduates will develop and demonstrate ability to engage in intellectually informed, appreciative, and critical inquiry regarding major faith traditions. Students will be familiar with the basic theological understandings and central texts that shape Catholic beliefs and teachings, practices, and spiritualities. Students’ abilities should be developed sufficiently to allow them to examine deeply their own faith commitments and also to participate intelligently and respectfully in dialogue with other traditions.

3. **Diversity**: All undergraduates will develop and demonstrate intellectually informed, appreciative, and critical understanding of the cultures, histories, times, and places of multiple others, as marked by class, race, gender, ethnicity, religion, nationality, sexual orientation, and other manifestations of difference. Students’ understanding will reflect scholarly inquiry, experiential immersion, and disciplined reflection.

4. **Community**: All undergraduates will develop and demonstrate understanding of and practice in the values and skills necessary for learning, living, and working in communities of support and challenge. These values and skills include accepting difference, resolving conflicts peacefully, and promoting reconciliation; they encompass productive, discerning, creative, and respectful collaboration with persons from diverse backgrounds and perspectives for the common purpose of learning, service, and leadership that aim at just social transformation. Students will demonstrate these values and skills on campus and in the Dayton region as part of their preparation for global citizenship.

5. **Practical wisdom**: All undergraduates will develop and demonstrate practical wisdom in addressing real human problems and deep human needs, drawing upon advanced knowledge, values, and skills in their chosen profession or major course of study. Starting with a conception of human flourishing, students will be able to define and diagnose symptoms, relationships, and problems clearly and intelligently, construct and evaluate possible solutions, thoughtfully select and implement solutions, and critically reflect on the process in light of actual consequences.

**Pertinent Geology Department Outcomes:**

- Graduates will be adequately prepared for employment in the geologic and environmental arena
- Environmental Geology majors will display interdisciplinary knowledge that is significant for success in their field

**Measures to be utilized:**

- At least 60% of graduating students will complete an internship, summer research experience, or summer job or volunteer experience in an earth science-related area.
On the Annual Survey of Exiting Students, over 2/3 of graduates will “AGREE” or “STRONGLY AGREE” with the statement, “As an undergraduate in the Geology Department of the University of Dayton I believe I am adequately prepared for a career in geology and/or environmental geology.”

On a Post-graduate Survey of alumni to be administered three years after graduation, at least 75% of students who have continued to post-graduate study will AGREE or STRONGLY AGREE with the statement, “I believe that my undergraduate experience at the University of Dayton adequately prepared me to pursue a career in earth and environmental sciences or related fields.”

6. Critical evaluation of our times: Through multidisciplinary study, all undergraduates will develop and demonstrate habits of inquiry and reflection, informed by familiarity with Catholic Social Teaching, that equip them to evaluate critically and imaginatively the ethical, historical, social, political, technological, economic, and ecological challenges of their times in light of the past.

7. Vocation: Using appropriate scholarly and communal resources, all undergraduates will develop and demonstrate ability to articulate reflectively the purposes of their life and proposed work through the language of vocation. In collaboration with the university community, students’ developing vocational plans will exhibit appreciation of the fullness of human life, including its intellectual, ethical, spiritual, aesthetic, social, emotional, and bodily dimensions, and will examine both the interdependence of self and community and the responsibility to live in service of others.

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**Assessment Responsibilities**

The Chair of Geology will develop an annual assessment report based on:

1) A questionnaire administered to graduating students.
2) Compilation of presentations, publications, and senior theses authored or co-authored by current undergraduate students or recently graduated students based on work conducted at the University of Dayton.
3) Compilation of results of a follow-up questionnaire sent to alumni three years after the date of their graduation.

The chair transmit the full report along with a summary to the Dean at the annual assessment deadline each summer and will present the full assessment report to the faculty for review and discussion at the first faculty meeting of the Fall semester each academic year. Faculty will also re-evaluate the assessment process at this time.
Assessment Schedule

1. End of Each Academic Semester:
   Department chair collects questionnaires from all graduating students.

2. End of each academic year:
   Department chair mails out post-graduate survey to alumni three years after the date of their graduation. Department chair tabulates and evaluates their responses.
   Department chair compiles and tabulates presentations, publications, and senior theses authored or co-authored by current or recently graduated students based on work conducted while at the University of Dayton.

3. By June 30 each year:
   Department chair completes assessment report along with an executive summary for the University Assessment Committee and transmits to the Dean.

4. First faculty meeting, Fall Semester:
   Department chair presents the annual assessment report to the faculty for discussion. The assessment process itself will also be discussed and re-evaluated at this time.