Department of Geosciences
University of Montana
Strategy 2020
Mission

Our mission is to develop new knowledge of Earth’s history, environment, and resources; engage our students in the process; and share that knowledge broadly.
We use scientific methods to study the physical processes that shape our planet and sustain humanity. We have two areas of special focus: water and earth. In both areas, we analyze cycles of energy and of earth materials such as water, minerals, sediments and rocks. These cycles impact the global distribution of water, energy resources, soils, natural hazards, and nutrients.

**water science**

We investigate water’s movement through the water cycle and its influences on landscapes and ecosystems. We study how ice, water, sediment and contaminants move through landscapes; how energy balance and other controls affect runoff and groundwater recharge; and the application of this science to restoration, management, and sustainability.

**solid earth science**

We focus on the outermost rocky layer of the planet, the lithosphere. We study its rocks and minerals, how it has moved and rearranged itself through time, the record of erosion and deposition, the evolution of life, and present-day hazards such as earthquakes and landslides.
Undergraduate Program

Principles
- Provide consistent instruction in a broad range of geosciences principles
- Optimize teaching loads and undergraduate course offerings
- Ensure continuity and sequence in course content
- Balance instruction between water and earth focus areas
- Revise courses to prioritize innovative and forward-looking content
- Revise courses to prioritize marketable skills
- Revise courses to prioritize critical and scientific thinking

Actions
- Remove redundant courses
- Revise GEO211: Earth’s History and Evolution
- Substantially revise GEO315: Structural Geology
- Add GEO318: Surficial Geology
- Change course sequencing to facilitate on-time graduations
Graduate Program

Principles
- Orient M.S. and Ph.D. programs toward 2020 vision of graduate education
- Create and maintain critical mass of graduate students
- Provide competitive TA and RA funding for graduate students
- Ensure high quality applicants
- Improve retention and degree completion rates
- Improve graduate program flexibility
- Improve graduate student morale and engagement

Actions
- Incorporate water and earth focus areas into TA allocation algorithm
- Ensure competitive matriculation by providing first-year financial bonuses to recruited students
- Create an annual graduate student workshop to provide opportunities for communication
- Encourage team-taught graduate courses that strengthen and bridge focus areas
Personnel

Principles
- Support current faculty and staff efforts in water and earth focus areas
- Add expertise in water and earth focus areas
- Maintain and strengthen faculty, staff, and student morale

Actions
- Expeditiously replace retiring faculty
- Maintain colloquium
- Create new opportunities for intellectual and social exchange
- Create new opportunities for faculty and staff development
- Revise faculty evaluation process
- Increase support for the Geology Club and other student groups
External Relations

Principles

• Elevate department’s on-campus profile
• Improve alumni relations
• Improve regional awareness of department activities
• Improve general geosciences literacy in Montana
• Coordinate with campus-wide outreach and marketing

Actions

• Distribute strategic plan
• Create department brand and branding materials based on focus areas
• Build new website based on department brand
• Create additional media products based on department brand
• Seek partnership with university-level branding and marketing efforts
• Explore creation of an alumni advisory board
• Communicate with alumni via department newsletter and web content
For more information about the Department of Geosciences, visit http://www.cas.umt.edu/geosciences