

Developing Opportunities for Undergraduate Geological Research at Whitman College

Departmental Programs and Facilities

Program strengths

Research/thesis requirement for honors
Research required for *Geology/Environmental Studies*
Research and presentation required for *Senior Seminar*
Keck Consortium Membership
Student presentations at regional and national meetings
Whitman Undergraduate Conference
Focus on field experiences
Internally funded summer research

Progress in the last 5 years

The addition of a new wing to the Hall of Science provided a substantial increase in space, allowing the creation of new labs and enlargement of research space.

- GIS lab
- X-ray diffraction lab
- student lab space
- faculty research space
- petrography research lab

The Future ...

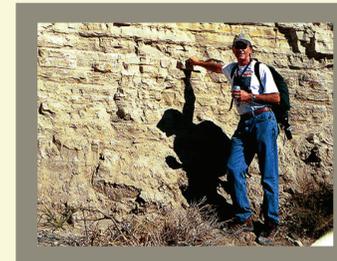
Inductively coupled mass spectrometer (summer '07)
InnovX portable X-ray fluorescence (spring '07)
Paleomagnetism lab (fall '08)
Increased collaboration with DOE Hanford Site



Focus on field experience - Hells Canyon



New GIS Laboratory



New portable XRF



New Hall of Science atrium



Faculty

Professor Bob Carson

Ongoing research collaboration with Mongolian geoscientists
Advises all *Geology/Environmental Studies* senior research
New course: *Late Cenozoic Geology and Climate Change*
Weekly field-based analytical problems in *Geomorphology*
Contacts and collaborations with local environmental scientists

Professor Pat Spencer

Active local research program
Traditional Paleontology replaced with Paleocology
Historical *Geology* as capstone course with worldwide focus
Focus on: Numerical taxonomy, population dynamics, morphometrics
Fewer lectures, more discussions, projects, presentations

Professor Kevin Pogue

Integrative "terroir" research
New *Weather and Climate* course to support *Environmental Studies*
Integration of *GIS* and *GPS* into research
Walla Walla American Viticultural Area as biogeological laboratory
Cordilleran Tectonics and *Google Earth*

Assistant Professor Kirsten Nicolaysen

Research on provenance of lithic artifacts through geochemistry
Lab-based *Mineralogy*, de-emphasizing lectures
More low-temp mineralogy
Student use of instruments in class labs (*XRF*, *XRD*, *SEM*)
Developing quantitative *Volcanoes* course