Background

The UW-Eau Claire Dept. of Geology is recognized nationally for the quality of its students, faculty, and rigorous, field-based geology program. Our students study multiple facets of Earth processes on three continents, gaining high-impact experiences from local hydrogeological studies and analyses of Paleozoic deposits, to field work in Andean sedimentary basins and geochemical studies in the Alps. Approximately half of the students complete student/faculty collaborative research projects and present results at professional meetings.

In November 2013, the University of Wisconsin System awarded UW-Eau Claire a \$451,000 Economic Development Incentive Grant to create a Responsible Mining program to be housed in, and built on the existing strengths of, the UW-Eau Claire Dept. of Geology. The Initiative is intended to help rapidly growing industries create jobs in an environmentally responsible manner.

Graduates will be well prepared to take jobs in:

- Metallic and non-metallic mining
- Hydrogeology/Environmental consulting
- Regulatory agencies such as the DNR



Initiative Goals

Developing a vibrant paid internship program with partners

The Responsible Mining Initiative seeks to develop paid student internships in industry and regulatory agencies. Students gain valuable on-the-job experience, and partners are able to hire bright, motivated students. The Dept. of Geology can assist your company/agency in developing an internship. Over the past two years, UW-Eau Claire Geology students have been paid interns at:

- Barr Engineering (Environmental consulting, Minneapolis, MN)
- Ensign United States Drilling Inc. (Natural gas, Denver, CO)
- Fairmount Minerals (Nonmet. mining, Menomonie, WI)
- Freeport McMoRan Copper
 & Gold (Met. mining, NM)
- Smart Sand Inc. (Nonmet. mining, Tomah, WI)
- Unimin Corporation (Environmental affairs, Mankato, MN)
- Unimin Corporation (Nonmet. mining, Tunnel City, WI)

"Unimin is glad to be part of UW-Eau Claire's Responsible Mining Initiative because of the emphasis it places on mining in an environmentally responsible manner. This is exactly the kind of program we want to support." Chris Axness, Plant Manager

Unimin Corp., Tunnel City, WI

Creating an innovative responsible mining curriculum

The Department is developing a rigorous curriculum to provide students with the hard skills and soft skills necessary for success. UW-Eau Claire will supply new permanent faculty positions to build the Responsible Mining program, including a contaminant hydrogeologist, geochemist, and a restoration ecologist. The curriculum is still in flux,

but the following are considered important parts of the proposed curriculum:

- Strong Geology core
- Hydrogeology
- Scientific Communication
- Chemistry I and Statistics
- Restoration Ecology
- Environmental Law/Policy
- GIS



Providing high-quality outreach programs for high school teachers and students

To prepare the next generation of natural resource professionals, high school students need to learn about existing mining and environmental issues, as well as the associated job opportunities. For this reason, outreach activities for high school teachers and high school students are critical. The Department will offer multiple-day short courses to

provide hands-on learning experiences and introduce them to the geology, natural resources, water resources, and geoscience careers in the upper Midwest.



"The Responsible Mining Initiative will produce students prepared to meet the challenges required to help develop and evaluate future economic development opportunities in the Midwest related to mining, the environment, and beyond."

Tina Pint, Senior Hydrogeologist and Vice President/Principal, Barr Engineering

University of Wisconsin-Eau Claire





Responsible Nining Initiative

The Responsible Mining Initiative is an effort by the UW System to make a positive, sciencebased contribution to the Midwest's workforce. The Dept. of Geology is excited about this new undertaking. However, outside partners are necessary in order to achieve Initiative goals.

Potential ways to partner with the Initiative:

- Establish internships
- Fund named scholarships for current Geology/Responsible Mining majors
- Sponsor the educational outreach programs for high school teachers/students
- Donate to the Geology Advancement Fund to cover equipment purchase/repair, student travel to professional meetings, and other vital needs to support the program
- Donate to the Hydrogeology Advancement Fund to support the environmental program
- Set up a "tools of the trade" award to buy geology equipment for students
- Supply guest lecturers and luncheons to provide student networking opportunities
- Sponsor a field camp





For more information, please contact

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Preparing graduates for jobs in mining, environmental consulting, and regulatory agencies