

UNDERGRADUATE STUDENT OUTCOME ASSESSMENT PLAN
GEOLOGY DEPARTMENT
John C. Gries, Department Chairperson

Revised Fall 2004

UNIVERSITY MISSION

Wichita State University is committed to providing comprehensive educational opportunities in an urban setting. Through teaching, scholarship, and public service, the University seeks to equip both students and the larger community with the educational and cultural tools they need to thrive in a complex world, and to achieve both individual responsibility in their own lives and effective citizenship in the local, national, and global community.

High quality teaching and learning are fundamental goals in all undergraduate, graduate, and continuing education programs. Building on a strong tradition in the arts and sciences, the University offers programs in business, education, engineering, fine arts, and health professions, as well as in the liberal arts and sciences. Degree programs range from the associate to the doctoral level and encompass 75 fields of study; non-degree programs are designed to meet the specialized educational and training needs of individuals and organizations in south central Kansas.

Scholarship, including research, creative activity, and artistic performance, is designed to advance the University's goals of providing high quality instruction, making original contributions to knowledge and human understanding, and serving as an agent of community service. This activity is a basic expectation of all faculty members at Wichita State University.

Public and community service activities seek to foster the cultural, economic, and social development of a diverse metropolitan community and of the state of Kansas. The University's service constituency includes artistic and cultural agencies, business and industry, and community educational, governmental, health, and labor organizations.

Wichita State University pursues its mission utilizing the human diversity of Wichita, the state's largest metropolitan community, and its many cultural, economic, and social resources. The University faculty and professional staff are committed to the highest ideals of teaching, scholarship, and public service, as the University strives to be a comprehensive, metropolitan university of national stature.

PROGRAM MISSION

The Department of Geology program seeks to prepare students with the scientific knowledge to proceed to geologic careers in industry, government, or to be admitted to a geology graduate program. Students are prepared for certification/registration on a state or national level where appropriate. Students are prepared with the background and skills to enable them to continue to learn, develop and adapt to changing conditions throughout their careers.



PROGRAM GOALS AND OBJECTIVES

GOAL #1: STUDENTS WILL LEARN A BROAD RANGE OF GEOLOGIC KNOWLEDGE AND THE ABILITY TO APPLY IT ON AN INTEGRATED BASIS.

Objective #1: Students will demonstrate the ability to apply integrated geologic knowledge to actual geologic problems.

GOAL #2: STUDENTS WILL BE PRESENTED WITH AND LEARN THE GEOLOGIC KNOWLEDGE AND RESEARCH SKILLS TO PREPARE THEM FOR CAREERS IN INDUSTRY, GOVERNMENT, OR ACADEMIC PURSUITS.

Objective #2: Geologic curriculum review will take place periodically using the recommendations of local, national and international professional geological organizations.

GOAL #3: STUDENTS WILL BE ENCOURAGED TO PARTICIPATE IN RESEARCH PROJECTS AND THEIR PRESENTATION IN CONJUNCTION WITH FACULTY AND OTHER STUDENTS.

Objective #3: Students may demonstrate involvement in research activities in conjunction with faculty and other students by participation in one or more of these research activities: research design, data generation, funding, presentation or publication.

ASSESSMENT OF STUDENT PROFICIENCY

Assessment of Goal #1: All undergraduate students are required to take capstone courses toward the end of their degree pursuit that combine elements of all the required and elected courses they have completed while an undergraduate. The department will use students grades from capstone courses as internal measures of student proficiency.

- a.) For B.S. geology majors the capstone course is Geol 640 - Field Geology (6 cr.). This 6 week course is taught in Colorado and meets the requirements for a capstone course. All aspects of geology are tested, and students must complete individual and group field mapping projects during the rigorous course. A passing grade in Field Geology is an indication that the student has gained mastery in the geosciences.
- b.) For B.A. geology majors any one of the following courses is a required capstone: Geol 621 - Geochemical Cycling (3 cr.), Geol 678 - Geologic Perspectives on Climatic Change (3 cr.), or Geol 681 - Computer Applications in Geology (3 cr.). In each of these courses the student is required to integrate geologic topics and demonstrate independent geologic thought. Mastery of course content material is demonstrated by a passing grade.

Assessment of Goal #2: The undergraduate curriculum will be reviewed on a rotating 3 year basis using recommended standards of the American Geological Institute, the American Association of Petroleum Geologists and a subgroup of the WSU GeoAdvisory organization. Results of students post graduate success in taking the exams for state licensing of geologists will be tracked.

Assessment of Goal #3: Students may demonstrate success in meeting this goal by involvement in one or more of the following activities and external recognition -

1. Professional oral presentations
2. Professional publication
3. External and/or internal grants
4. Awards from Professional Societies, etc.
5. Presentation at local, regional and national conferences.

Each of these measures is notable and represents mastery of the geosciences.

OVERALL ASSESSMENT OF STUDENT PROFICIENCY

Results

Some of the above resulting data has been collected for a number of years. We anticipate further data collection during the Spring 2005.

Feedback analysis

The department will gather and analyze results from each of the assessed goals on a 3 years rotating cycle. The Chair will oversee this activity and present the results to the faculty at a departmental meeting. The faculty will determine whether or not the objectives have been achieved, and, if not, what corrective actions need to be taken.