



Creating Community on a Commuter Campus

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Motivation

UTEP is a commuter campus at the undergraduate level. Over 80% of undergraduates live at home and 60 to 70% speak Spanish in the home. Many hold down one or two part time jobs while attending classes. Over 50% of successful graduates are the first person in their family to complete a college degree. These factors lead to an average 6 year graduation rate with low grade point averages. The Department of Geological Sciences at UTEP has instituted a number of extracurricular activities to assist students in completing degrees in a shorter time period, improving GPA's, and to encourage undergraduates to continue on to graduate school.



Student presents a poster at colloquium. □□

Research Assistantships/Research Groups

In the past 5 years the department has aggressively sought funding for undergraduate research assistantships, although individual faculty have supported undergraduates on various research grants for over 20 years. Significant programs include Pathways (supported by NSF), PACES (Pan American Center for Environmental Studies, supported by NASA) and a NOAA supported grant for environmental curriculum development. Student participants receive faculty mentoring on at least a weekly basis, often interact with graduate students and faculty in research groups, and are required to write monthly progress reports, as well as orally present their research results each semester. Many have made presentations at regional and national professional meetings and participate in the department's annual student colloquium. Students have 24 hour access to the geological sciences building and its computer facilities, and are given desk/cubicle space in the graduate student office area as space permits.



Students congregate in one of several computer areas within the department.



The earthquake research group enjoys a get together at a local pizza parlor.

Student Research Colloquium

This highly successful showcase for student research has been operating for 19 years. The day-long event is organized and conducted by students as a professional forum to present their research results in oral or poster format to an audience that is often less "threatening" to new researchers. An abstract volume is produced and geoscience professionals from oil, mining and environmental companies serve as judges for the presentations. This gives students a chance to interact with professionals and to showcase their abilities to companies who may later employ them. The feedback provided on presentations serves as part of our continuing departmental assessment process. This year we are also using the colloquium as a recruiting tool by inviting prospective graduate students from outside UTEP to attend. Industry financial support has allowed us to give generous (\$100-\$200) prizes for outstanding papers, as well as to provide refreshments for breakfast, lunch, coffee breaks and a post-colloquium party. A Saturday field trip usually follows the colloquium.



The El Paso region has many excellent localities for colloquium field trips.

Student Organizations

The department has 4 active professional organizations that engage undergraduate and graduate students in professional, community service and social activities. These organizations are: Sigma Gamma Epsilon, a geological honor society, and student chapters of the American Association of Petroleum Geologists, Society of Exploration Geophysicists and Society of Economic Geologists. Professional activities include operation of a student geology reference library, field trips to mines, oil rigs, and other industrial sites, and sponsorship of workshops. All the groups are involved in outreach activities to local K-12 schools, help to sponsor week long series of department open house activities for Earth Science Week, and many serve as judges for local science fairs. Several have been involved in charity fund raising drives. Sigma Gamma Epsilon raises money for professional and social events through the sale of rock and mineral identification kits to students taking introductory geology laboratories and to local K-12 schools. They have initiated a campus cleanup activity where they obtain pledges for the number of bags of trash they collect. All groups support an end of the academic year picnic where students and faculty, as well as hot dogs and hamburgers, are "roasted".



Students posing with trash collected during fall 2004 campus cleanup.



Students sell rock and mineral identification kits.

Outcomes

We feel the extracurricular activities available in our department foster a sense of community between students and faculty. The activities provide many opportunities for informal mentoring between students and faculty, as well as between undergraduates and graduates. Undergraduate students who have been able to work as research assistants graduate 1 to 2 semesters earlier and have GPA's that are 0.5 units higher than those students who have not had these opportunities. In the past 9 years 58% of our undergraduates have chosen to attend graduate school.

Travel to Professional Meetings

The department encourages students to attend regional and national professional meetings, especially those within a day's drive of campus (e.g. over 25 students attended the 2004 GSA meeting in Denver). Support for travel comes from endowment money, corporate gifts, and travel funds available through the college of science and the graduate school (for student presenters). The students serve as effective recruiters for our graduate program, in addition to obtaining valuable contacts for future employment or for entry into other graduate programs.



Female students attending fall 2004 AAPG Student Expo in Houston.