

Request for Increased Student Fee
TEXAS A&M UNIVERSITY
College of Geosciences Differential Tuition (Undergraduate)

I. Programmatic justification and proposed use of the increased fee

We propose to increase the current rate of \$107.45/term to \$244.39/term for students taking 12 or more SCH beginning with academic year 2016-2017. Differential tuition is charged only in the fall and spring terms, and is prorated for students taking less than 12 hours. The annual net revenue increase of \$72,556 in 2016-2017 will be invested as shown in Table 1 below. A comparison to other Geoscience schools is shown in Table 2.

A. Justification:

Field experiences for undergraduate majors in the College of Geosciences, whether they take place in Texas, the western United States, abroad or at sea, are an essential element of a high quality education in the Geosciences. In the field, students reinforce their classroom learning and emulate the activities of professional geoscientists by conducting all aspects of a project. These include planning, collecting, analyzing and interpreting data, incorporating background and supplemental data, and producing oral and written reports of results. The projects also stimulate deeper interest in the subject matter as well as complex reasoning skills, and are structured to develop strong teamwork and communication skills among students. Prospective employers expect Texas A&M Geosciences students to graduate with these skills and knowledge.

Since 2012, the College of Geosciences has seen significant growth in both undergraduate enrollment and in student demand for and participation in high impact field experiences, including study abroad. For example, the college's enrollment in study abroad experiences has increased 76% over the last 3 academic years and in 2015 the college posted the largest increase (38%) in study abroad at Texas A&M University. Further, the number of undergraduate majors has increased by 49% in the same time period, while faculty numbers have remained flat.

To support this growth and a high quality education, the faculty have proactively taken steps to permanently integrate more field experiences into both lower- and upper-division coursework for all undergraduate majors. Examples of field experiences include shipboard measurements in the Gulf of Mexico, hydrologic measurements in the rainforests of Costa Rica, launching of tethered sondes to forecast storm activity and mapping the geology of the western United States.

Field experiences are fundamental to the intellectual development of geoscientists with marketable skills, but they require smaller class sizes (and therefore greater faculty staffing) as well as significant travel and equipment expenses. The increase in differential tuition proposed here will ensure that the college can overcome the instructional challenges that the combination of rapid growth in the number of majors and increasing demand for study abroad

and field experiences present and ensure that all students majoring in the college have an opportunity to participate in transformational field experiences that are safe and effective.

B. Proposed Use

Table 1 - Additional Annual Needs (Based on net revenue after 15% set-aside)

1. Field experiences (Faculty support)	\$ 40,134
2. Field experiences (Graduate Teaching Assistants)	\$23,450
3. Operational Costs (Expendables and Ship Time)	\$8,972
Total	\$ 72,556

Details:

1. Salary support for faculty leading field and study abroad programs for majors to allow all:
 - a. GEOG and GIST majors participating in a common field experience in the first year at Texas A&M University along the Texas Coast, mountains of Colorado and Costa Rica
 - b. ATMO majors participating in the Student Operational Aggie Doppler Radar Project (SOAP) program each year
 - c. Students completing an OCNG minor to gain scientific cruise experience in the Gulf of Mexico throughout their time in College Station
 - d. GEOL/GEOP students to participate in field experiences in each of year of the program
 - e. ENGS and ENST students will be able to participate in any of the field and study abroad programs listed above
2. Salary support for Graduate Teaching Assistants to support faculty in leading the above field and study experiences for majors as well as increasing the instructor to student ratio to ensure program effectiveness and safety. Additional Graduate Teaching Support is also required to help cover the common freshman and capstone courses.
3. Operational costs to support the field and study abroad programs listed above including:
 - a. Travel costs for faculty and graduate students to lead the field and study abroad programs in GEOG at no additional cost to the students
 - b. Expendable field supplies for the SOAP program including weather balloons and helium
 - c. Professionalization course for ENST and ENGS students involving former students who would provide advice on careers, networking, in addition to professionalization experiences for ENGS and ENST students in their capstone experience
 - d. Ship time for the OCNG students to gain scientific cruise experience

II. Public hearing and/or student referendum requirements

At the appropriate time, the College of Geosciences will make presentations to the college's student councils. An email will then be sent to all Geosciences students providing summary information about the change proposal and announcing a general student hearing. A website reference will be included in the email to provide more detailed information about the proposed changes to the assessment model and associated justifications. Additionally, the proposal will be shared with the Executive Committee of the college's student council. Announcements about the student hearing will be made throughout the Geosciences academic buildings on display monitors and bulletin in advance of the hearing date.

III. Budget impact if fee request is not approved

Without an increase, the College of Geosciences will not be able to offer as many high impact field and study abroad experiences and will lag behind other geoscience programs in the State of Texas and nationally with respect to field experiences for our students that industry has come to expect and require of graduates.

In order to stay competitive Geosciences must provide additional high-impact programs demanded by high-achieving students and offered in other top geosciences schools. Geosciences programs nation-wide are changing and improving at a rapid pace. Without additional revenues Geosciences will be unable to innovate and generate premier graduates with the field experiences required for industry careers.

IV. Justification for ending balance

Current balances are set aside for salary increase for faculty and staff funded on DT. Any new salaries funded by an increase will also require a reasonable reserve. There will also be a reserve created for facility enhancements and equipment purchases since the timing of these expenditures cannot be easily predicted and several terms may be required to accumulate funding to purchase costly field and laboratory equipment. Otherwise, no ending balances are expected.

V. Additional information

Table 2 compares Geosciences proposed total fees and tuition to other public top-tier geosciences school costs as of 2015-2016 academic year. Some of these schools may have additional college specific fees unavailable on their websites. Even with an increase in tuition, Geosciences is still the lowest cost geosciences or earth sciences school in the sample.

Table 2 – Annual Differential and Total Tuition and Fee Comparison

University	TAMU Geosciences DT	Total Tuition and Fee Cost
Oregon State		10,008
Penn State		17,514
Oklahoma		11,158
South Carolina		11,482
Arizona State		10,478
UT Austin		10,884
Geosciences - Proposed	489	9,675
Average w/o Geosciences		11,921
Median w/o Geosciences		11,021