

## Abbreviated Strategic Plan

**Preamble:** In Fall 2014, the department had fifteen tenured/tenure-track faculty, two non tenure-track faculty, four administrative support staff, and three technical support staff. The Department had 123 undergraduate majors in the College of Science (and 42 undergraduate majors in University College), 24 MS students, and 26 PhD students. During the AY2013-2014, the Department taught a total of 10,890 student credit hours. During AY2013-2014, the Department was awarded \$3,110,867 from Federal, State, and Private sources.

**Mission:** Our mission is to increase our understanding of Earth and Planetary Sciences, to apply our scholarship for the benefit of Earth, society, and our profession, and to prepare the next generation of students to pursue their chosen careers and to make informed decisions about Earth and its resources.

**Vision:** The Department of Geology and Geophysics strives for national recognition of our excellent research endeavors and of our excellent preparation of students for their chosen careers.

**Goals:** Our goals are to increase our nationally recognized research activities in the Earth and Planetary Sciences, to prepare students who can pursue their chosen careers, who can make informed decisions about Earth and its resources, and who can serve as leaders in industry and communities, and to serve as leaders ourselves in applying our knowledge in society and in our professions. Our strategic plan focuses on three specific goals related to Discovery, Learning, and Engagement that form the basis of our Mission. For each goal, we describe indicators that will alert us as to the achievement of our goals and thus fulfillment of our Mission.

**Discovery:** Our mission is to increase our understanding of Earth and Planetary Sciences and our vision is to strive for national recognition of our excellent research endeavors.

*Performance Indicators:*

- Amount of grants and contracts funded per Tenure and tenure-track faculty member (T/TT)
- Number of funded grants and contracts per T/TT
- Number of peer-reviewed research papers per T/TT
- Total number of citations to our research works

*Strategies: we will use:*

1. Continue to implement (as possible) alternate teaching schedules that will allow for more (or longer) uninterrupted blocks of time that faculty will use for enhancing their research productivity (as measured by a higher rate of funding success, higher number of publications and presentations, and higher numbers of citations to our works)
2. seek funding for the replacement (and/or upgrading) of aging research infrastructure and instrumentation permitting faster sample processing times and improving resolution (or detection limits), thereby enhancing sample throughput and that quality of the data that are needed for inclusion in papers, proposals, and presentations
3. hire a grants & contracts coordinator, who will help us with administrating our grants and research proposals, thereby enhancing our overall research productivity

*Summary:* Over the past five years, the G&G faculty have made great strides in enhancing their research productivity (publications, citations, and grants and grants funding). In addition, we continue to good access to research instruments either through replacements of older equipment in the Department or through SIF. Finally, plans are in place to hire a Grants and Contracts Coordinator who will facilitate research by easing the account management responsibilities currently borne by faculty and existing front office personnel.

**Learning:** Our mission is to prepare the next generation of students who can pursue their chosen careers, who can make informed decisions about Earth and its resources, and who can serve as leaders in industry and their communities. We strive to pursue excellence in our educational programs by increasing overall instructor effectiveness, by increasing opportunities for undergraduate students to participate in research, by facilitating the progress of graduate students through their degree programs.

*Performance Indicators:*

- overall instructor effectiveness in the General Education
- overall instructor effectiveness in the courses offered primarily for BS G&G majors
- overall instructor effectiveness in the course offered for G&G graduate students
- number of undergraduate geology students involved in writing undergraduate theses

*Strategies: we will use*

1. Provide partial financial support to faculty members who participate in Educational Workshops so that we insure that current pedagogical practices are used in GEOL courses. Attendance at such workshops should translate to increasing overall teacher effectiveness across all level of courses.
2. Encourage undergraduate geology students to participate in thesis research (geol3999). Thesis research requires development of critical thinking skills.
3. Increase the number of upper-level undergraduate courses that include course-embedded undergraduate research experiences (CURE). Research experiences develop critical thinking skills. (New measure to be included in CY2015 report).
4. Offer numerous 7000-level courses per semester, thereby facilitating the progress of MS students and PhD candidates through the coursework portion of their graduate education

*Summary:* Over the past five years, enrollment in our programs has increased, measures of overall instructor effectiveness are matching College of Science averages, and the number of students completing undergraduate theses is increasing. Our educational programs are in quite good shape and we are meeting our benchmarks. We need to focus efforts to further increase the number of BS students who complete undergraduate thesis.

**Engagement:** Our mission is to apply our scholarship for the benefit of Earth, society, and our profession to apply our scholarship for the benefit of Earth, society and our profession by engaging with community and State boards and commissions, by speaking about our science in forums accessible to the general population, and by volunteering in leadership roles in our professional societies. Our goal is to serve as leaders in applying our knowledge in society and in our professions.

*Performance Indicators:*

- percentage of Professors engaged in editorial and/or reviewing of research publications and/or research proposals
- percentage of Professors holding leadership position with a Professional Societies
- number of local or State Board/Commissions with which faculty are engaged

*Strategies: we will use*

1. seek opportunities to serve as editors, associate editors, and reviewers for journals
2. seek opportunities to serve as reviewers and/or panelists for proposals
3. seek opportunities to engage with our Professional Societies
4. seek opportunities to speak to the public about our science

*Summary:* Over the past five years, the G&G faculty have consistently served on editorial boards, on governing boards, and on review panels. Our level of engagement with our societies and with the community/State meets our benchmarks.