TO: Dr. Clifford Fedler  
Graduate School

RE: Post-graduate program review

On May 20, 2010, Geosciences responded to the report on the review of the graduate program. In this response, eight action items were presented, five of which were short-term, the other three being long-term items. In what follows, I will address each of these action items and indicate progress that has been made to date.

Action items for the short term (one year).

1. Address the number and sequence of course requirements for the MS degree in ATMO.

At a meeting of the ATMO faculty in September, 2010, the sequence of courses required for the MS degree in ATMO was modified to better reflect program requirements and faculty specialties. This resulted in two graduate courses being dropped from the curriculum, with the number of required courses reduced from 12 to 10; however, the number of credit hours required for the degree remains unchanged. The six credit hours freed up by this change are now filled with ATMO 7000—Research.

2. Develop a formal process for coordination of the Geosciences Ph.D. among ATMO, Geology/Geophysics, and Geography (to join the Department in September, 2010).

Following the merger of Geography into Geosciences, overall coordination of the Ph.D. is under the auspices of the Associate Chairperson, who communicates with graduate advisors in the three departmental areas (solid-earth geosciences, Atmospheric Sciences, Geography).

3. Continue to provide desktop computers in grad student offices. Explore the feasibility of wired internet access. Request TTU to provide adequate wireless access.

Renovation of the BA tower will result in a minimum of two wired internet access points in each Atmospheric Science office. Additional ports will be included in design plans (in progress). During the summer of 2010, additional laptop computers were purchased for ATMO graduate students. In geology/geophysics, desktop computers have been supplied to students who request them. These computers are meant for routine computer chores; high-speed computers for high-performance computation are available in individual faculty members’ research labs.
Geosciences has also arranged for new computer ports in one Geography office (for student use) and in two laboratories.

4. Formalize the graduate advising process in ATMO.

Dr. Chris Weiss has taken on the graduate advising process in ATMO, with assistance from Dr. Eric Bruning. The ATMO group continues to coordinate advising and student assessment as a committee-of-the-whole, which is possible in a six-member group.

5. Continue strenuous efforts at graduate recruitment, including at designated minority schools.

We now recruit on essentially an annual basis at three professional meetings: Geological Society of America annual meeting, American Geophysical Union Fall meeting, and the American Metrological Society annual meeting. Faculty members and graduate students take part in the recruiting process. In the past year, at least half of the students who have entered the program were met at recruiting sessions. In addition, top graduate student prospects are invited for campus visits. About 80-90% of the students who visit campus matriculate into our programs. Because of the costs involved in time and money, we do not conduct individual campus recruiting trips, the one exception being Angelo State. When faculty members are invited to speak at other campuses, they do discuss graduate programs with prospective graduate students.

Action items for the long term (one to five years).

6. Revise the Strategic Plan for all Geosciences components to conform to the new TTU Strategic Plan, with specific focus on strategic hiring, graduate student recruitment and retention.

In progress. Work has just begun, now that the College Strategic Plan is complete.

7. Continue to work toward acquisition of analytical equipment and laboratory improvements.

The ATMO group has completed construction of the second Ka mobile radar. We have added a state-of-the-art stable isotope mass spectrometer and an x-ray diffraction unit. We have requested funds to renovate lab space for a seismology laboratory + classroom and a palynology lab.

8. Explore the implications and needs for earth science education in light of new Texas education requirements (e.g., education at the graduate level for Earth Science teachers).

In progress.