MEMORANDUM

To: Daniel Howard, Executive Vice President and Provost
From: Enrico Pontelli, Dean, College of Arts and Sciences & Nancy McMillan, Department Head, Geological Sciences
Subject: Program Review Action Plan for Geological Sciences
Date: May 2, 2016

Dear Provost Howard,

Interim Dean Pontelli, Dr. McMillan, and Interim Asse. Dean Hubbell met on April 27 to discuss the Geological Sciences Program Review Final Report. Dr. McMillan had prepared a comprehensive response to the external reviewer’s suggestions (see attached) and we worked together to determine the below proposed 5 year plan.

It is important to note that the Geological Sciences Department was the first to go through Program Review for the College of A&S and Dr. McMillan and her faculty and staff developed a model Self-Study and their organization and proactive and positive attitude through the entire process is to be commended as well. To be expected the external reviewers found the program to be a “model for success at New Mexico State University and other similar state universities.”

Proposed Five Year Plan for Geological Sciences:

(NOTE: external reviewers’ suggestions such as tuition waivers for graduate students is beyond the control of the department. Only suggestions that are within the purview of the College and/or department are included)

1-year goals (2016-2017):
- Revise/redirection the “Earth and Environmental Systems undergraduate track.” This includes further research into the suggestion that the department create a new “Environmental (Geo)Science undergraduate track.” The Department will work on revising the current to track and determine how they can incorporate the reviewer suggestions.
- Create a “Climate Change” Interdisciplinary Program/group. The Department has already began this process. It was not recommended by reviewers yet it will bring together departments across disciplines for research and potentially academic collaborations.

Resume annual meetings between the department heads of Geological Sciences and Physics and the Arts and Sciences Research Dean to discuss space assignments in Gardiner Hall. These meetings were instituted in 2010 when the departments moved into the newly-renovated building to annually assess the space needs of the two
departments and to make changes in space assignments in accordance to needs. The Academic Program Review committee defined several significant space needs, and the Department of Geological Sciences has created a plan to solve which they would like to propose to the Physics Department.

2-5 year goals (2017-2022 - ongoing with 5 years to be the goal for completion):

- Adding 1½ - 2 faculty lines. This would include converting Dr. Emily Johnson from College-Track to Tenure-Track and adding a new paleoclimatologist. Both requests are currently under review in College of Arts and Sciences and if not filled, the department will continue to submit requests when possible.
- Hire a full-time lab technician to help service specialized laboratory equipment
- Continue to address space needs for labs, lab classrooms, and GA space.
MEMORANDUM

To: Enrico Pontelli, Dean, College of Arts and Sciences
From: Nancy J. McMillan, Department Head, Geological Sciences
Date: 26 April 2016
Re: Implementation of Recommendations from Academic Program Review

The Academic Program Review process was a great success for the Department of Geological Sciences. We were happy to be the first department in the college to go through the process, and we learned an enormous amount about our program by seeing it through other's eyes.

The APR committee made five recommendations. Some of them require significant funding; others can be implemented with relative little funding. Because of the current university funding situation, I will focus on the less-expensive recommendations.

Here are the committee's five recommendations:
1. Hire Dr. Emily Johnson as a half-time tenure-track faculty member. This request was submitted in Spring 2016.
2. Redirect the Earth and Environmental Systems option in the BS Geology degree.
3. Hire a new full-time tenure-track faculty member. A request for a paleoclimatologist was submitted in Spring 2016.
4. Hire a lab technician and obtain more space for analytical equipment.
5. Provide alternative space for graduate student offices. Currently, all GAs are in cubicles in a single office, which is not conducive to either their teaching or their research roles.

Hiring new faculty, including transitioning Dr. Johnson from College track to tenure track, are costly, and I hope that our requests receive serious consideration with the weight of the APR committee's recommendations behind them. However, at this time, I think it appropriate to focus on the other recommendations.

Redirect the Earth and Environmental Systems option in the BS Geology degree. The faculty is interested in changing the Earth and Environmental Systems option from its current policy focus to a broader Geoscience focus by incorporating classes from other geo-related curricula such as Geography, Soils, etc. We are interested in focusing on climate change as well as environmental
topics that will make our students competitive in the work place. We expect that no new resources will be needed to complete this task. However, the expectation is that the option may draw in many new majors, which will cause space issues in the department. Those potential space issues are not addressed in this proposal, and will be assessed in the future.

On a related topic, the department is interested in building interdisciplinary research projects that investigate the processes involved in climate change and the impacts on the natural environment.

*Obtain more space for analytical equipment.* We designed our analytical lab with space to grow for 10 years. After only six years, we have completely outgrown the room (four major pieces of instrumentation) and are stepping on each other's toes, as shown in the photos below.

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*Provide alternative space for graduate student offices.* Currently, we have 15 cubicles for graduate students all in a single room. This has proven to be an unsuccessful (a look at the literature on cubicles indicates that we are not alone!), and our graduate students find spaces in labs, classrooms, and the geology office for their office hours and to work on class work and research. Worst of all, they tend to work at home on their theses. Between constant distractions and temptations and the lack of scientific interaction, the situation stunts their professional development.

A possible solution to both space problems is illustrated on the next page. Unfortunately, any space gained by Geological Sciences is lost by Physics. This plan attempts to meet our most pressing space needs while minimizing the impact on Physics. The upper diagram shows the current distribution of space in the first floor, south wing of Gardiner Hall. The lower diagram shows our proposed distribution of space.
In this plan, these Physics rooms would be converted to Geological Sciences:
- Physics undergraduate lounge and Society of Physics Students meeting room
- Two offices that were converted to lobby display space but not used as such
- One emeritus office
- An office that doesn’t appear to be used

As I remember, student lounge space is one of the lowest priorities on the College space allocation priorities, and the two spaces that used to be offices are performing no specific useful purpose. Occasionally, students sit there to hang out or study, but the space is not really conducive to either, as this photo shows.

The rooms that were Physics offices would be occupied by Geological Sciences graduate students, and the space previously occupied by the Geological Sciences GAs would become the new LIBS lab, relieving the space crunch in GN 164. The LIBS requires no special outlets or building modifications.

The costs in this plan include only closing the front and sides of the two display spaces, including adding doors (see photo below). We can use the current furniture for GAs and the lab in the new spaces. We can also move the furniture and lab equipment.