Technology Fee Proposal

Submitted to the Senate Committee for Information Systems and Technology
by
Department of Geology
&
Geology Club
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“Integrated Computer Facilities for Student Use in Geology”
FY01 Budget Request - $ 20,000

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Contents

• Narrative description of project
• One-time funding description
• Continuing funding requirements beyond the first year
• How the proposed activity benefits students
• How the proposed activity does not displace current operating budget

Narrative

The Geology Department offers students the opportunity to earn BS and MS degrees, as well as the advanced graduate certificate in hydrogeology and the new PhD in Geochemistry (in cooperation with the Department of Chemistry). Typically, geology majors number around 50 students, with about 20 additional Masters and certificate students and, currently, 3-4 PhD students projected for Fall 2000. In addition, around six hundred students each year enroll in introductory geology courses to satisfy core requirements. Consequently, the geology department, in collaboration with the student members of the Geology Club, present this proposal for the use of technology fees that will benefit all 70-75 students studying to be professional geologists as well as those students in the introductory courses.

Funds requested from the technology fee will be used for three purposes.

1. Hardware and software to outfit a computational laboratory located within the geology department space on the third floor of Kell Hall.

2. Student Assistant funds to hire a part-time person or persons to help build, monitor, and oversee the utilization of the computational facilities.
3. Limited amounts of **consumables** such as printer paper, toner, inks (both black and color), and storage media (diskettes).

Currently, geology students at all levels are **required to use computers** for a variety of tasks ranging from word processing to spreadsheet calculations to specialized geochemical and geophysical software. Students perform these tasks in university computer labs, on several computers that are set up sparsely throughout the geology department teaching labs, or on personal computers at home or at work. However, under the current scheme, **students often have problems**. Few of the department machines are connected to the web, and most do not have suitable printers. None have color printers. Likewise, university machines are not set up for some of the specialized geological programs that must be used, nor are personal home or work computers. To improve the overall computing environment, we propose to add several new centrally-located computers for student use. More importantly, we want to **network** all the local computers in such a way that students using any machine in the department can access relevant programs from a central server, and can print to any of a number of different printers. These would include B&W laser-jet letter-quality, color laser-jet, and a large format (30”) color printer/plotter.

In order for such an integrated network to function properly, someone must be in charge. For our purposes, we feel that funds used to support one or more **student assistants** are the best way to satisfy this need. In our experience, students with computer savvy have been very helpful in getting machines set up and functioning properly. In fact, several recent geology graduates are now working in computer services jobs, and the experience they gained on their own with some of our computers helped them to learn what they needed to begin these careers.

**One-time funding**

1. 4 new computers @ $2500 each ............................. $10,000
2. HP laserjet 5000 .................................................. $ 1,500
3. HP color laserjet 4500 ........................................... $ 2,500
4. Consumables ......................................................... $ 1,000
5. Specialized geology software ................................... $ 1,000
6. Student Assistant, year 1 ......................................... $ 4,000

   Total ........................................................................... $20,000

**Continuing funding beyond the first year**

1. 1 machine per year replacement ................................. $ 2,500
2. Consumables .......................................................... $ 1,000
3. Software upgrades/purchases ....................................... $ 1,000
3. Student Assistant ...................................................... $ 4,000

   Total ........................................................................... $ 8,500
Cost-sharing: Please note that the geology department will cost-share a portion of the funds needed to fully integrate the computational system available to students. For example, the department just purchased a $9,000 color printer that handles 30” media. This machine will be accessible to students to produce poster presentations for class assignments.

How the activity benefits students

Geology students, by nature, have always constituted a tight learning community. However, several things actually work against the learning community model. One is part-time jobs outside of the department that separate students for significant portions of time. Another is the need to go elsewhere to carry out computing assignments. This proposal seeks to support the learning community model by providing centralized resources for students to conduct their computational activities on-site. A major advantage will be that students will have ready access to faculty members who are, after all, also members of the learning community. This proposal also seeks to employ one or more students in a way that will be more beneficial than some part-time jobs that they might otherwise accept.

How the activity relates to the department operating budget

Currently, the department tries to provide rudimentary computing facilities for students. This usually takes the form of cast-off computers and printers emanating from faculty offices or research labs. The department budget is simply not sufficient to provide better computer facilities exclusively for students’ use. A source of funds from the technology fee will, therefore, be well spent and appreciated by all geology students.