

EQUIPMENT NEEDS ASSESSMENT APPLICATION
Fall 2015

Name of Person Submitting Request:	Todd Heibel
Program or Service Area:	Geology-Oceanography
Division:	Science
Date of Last Program Efficacy:	Spring 2012
What rating was given?	Continuation
Equipment Requested	Heavy Duty Utility Cart
Amount Requested:	\$1,000
Strategic Initiatives Addressed: (See Appendix A: http://tinyurl.com/15oqoxm)	Access and Institutional Effectiveness

NOTE: To facilitate ranking by the committee, submit separate requests for each item; however, multiple items can be submitted as one request if it is required that the equipment is packaged together.

Replacement Additional

1. Provide a rationale for your request.

At present, the entire institutionally supported, annual budget for the GEOL-OCEAN Department is \$1,350. The majority of funds – more than \$1,150 – are used to support field research. This means that less than \$200 remains for all other expenses, including instructional and non-instructional supplies, equipment, and technology. **Currently, there is no budget to support any equipment expenditures, including a long-needed, heavy-duty utility cart.**

Transportation of mineral and rock specimens, equipment, and other supplies to and from the classroom, storeroom, and field occurs on an ongoing basis. Many of these specimens, equipment, and supplies are bulky and heavy. Currently, the department must rely on the good will of other departments in order to borrow utility carts to transport items. When carts are unavailable, it imposes significant logistical hardship on departmental students and faculty. Purchase of a heavy-duty utility cart would alleviate this hardship, as well as preserve other departments' equipment for their specific uses. In addition, anticipated long-term maintenance costs for a utility cart are minimal (e.g. bearings, tires, and inner tubes will need to be replaced, but only infrequently).

2. Indicate how the content of the latest Program Efficacy Report and current EMP data support this request. How is the request tied to program planning? (*Reference the page number(s) where the information can be found on Program Efficacy.*)

Although a utility cart is, by definition, quite utilitarian, it has the potential to positively impact the efficient operation of lecture, laboratory, and field activities. Therefore, overall enrollment, success, retention, and efficiency could be positively impacted. There is now an AS-T degree option for GEOL students, and OCEAN courses are being offered on a regular basis following a multi-semester hiatus. Within the EMP documents, the need for an increased equipment budget is clearly identified within Goals, Challenges and Opportunities, and Action Plan sections. In addition, the Spring 2012 GEOL-OCEAN Efficacy document implicitly identifies the need for equipment on pages 13, 20, and 30.

3. Indicate if there is additional information you wish the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, planning, etc.*).

As previously mentioned, the updated course outlines of record for all geology and oceanography laboratory courses imply the use of balances within laboratory exercises. To deprive students of hands-on use of balances runs counter to stated course objectives and course content. In addition, students who wish to transfer to four-year institutions will be expected to understand the basics of balance use within upper-division geology, oceanography, environmental, and Earth science courses. Students who wish to enter the job market will also be expected to know how to use a balance. Please refer to the labor market information below. These career opportunities will be foreclosed to students who are not properly prepared (including proper balance use):

Occupation:	Mean Hourly Wage:	Annual Average Openings:
Geological and Petroleum Technicians	\$39.23	80
Geoscientists	\$46.63	260

Source: State of California Employment Development Department (2013).

4. Evaluation of initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources (*for example Department, Budget, Perkins, Grants, etc.*).

Because the overall, annual departmental budget is miniscule – only \$1,350 – any additional funds are welcome. The additional \$750 for equipment – in the form of a utility cart – is needed to alleviate logistical issues with transporting heavy, bulky items.

This funding is needed, as demand for GEOL-OCEAN courses is anticipated to increase with the recent approval of the AS-T degree, as well as improved job market prospects (especially within the energy and environmental sectors). In addition, a full-time faculty hire should also increase student demand. This will, in turn, increase the need to transport heavy, bulky items.

To date, the GEOL-OCEAN Department has relied upon other departments and one-time sources of funding to sustain equipment. However, this piecemeal approach is unsustainable and not pedagogically sound. While grant funding could be pursued, there are no guarantees that funding would be procured, especially within the current grant funding climate. In addition, grant writing and administration requires significant time and energy. Unfortunately, the division's secretarial and administrative support, as well as available departmental faculty resources are already overtaxed and cannot accommodate additional grant duties.

5. What are the consequences of not funding this equipment?

Lacking a heavy-duty utility cart, the GEOL-OCEAN Department must continue to rely upon other departments' equipment, as well as the fickle, inconsistent nature of one-time, special funding. Timely transport of items among classroom, storeroom, and field will remain jeopardized. This will continue to negatively impact upon the efficient delivery of instructional and non-instructional goods and services.