2010 - 2011 Laboratory and Classroom Modernization Request

iMac – Regular Projector

Lab Micheels Hall 176 computer lab Location MH 176

Department(s) Art and Design Priority 1 of 4

Chair Signature

College/School Arts, Humanities, and Social Sciences Priority 3 of 5

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I. Cost Estimate

	Lab/Classroom Modernization Funds
Equipment	86,030
Services and Supplies	
Remodeling	3,000
Total	89,030

II. Describe Equipment Requirements
(Please list items to be purchased and estimated costs.)

Computers w/monitors, mice (25)	67,450
Computer desks	12,000
Cable locks	1,200
Teaching station desk	1,600
Teaching station equipment	500
Projector lamp (2)	1,000
Video equipment	2,000
Server equipment	280

IV. Describe Remodeling Requirements and Cost Estimate

Install card reader access to entrance	2,500
General Services or T&N rewiring	500

VIII. Pedagogical Rationale/Justification of the Request

The Multimedia concentration of Art and Design continues to evolve with the development of advanced courses in three-dimensional graphics and animation, and now also collaborates with the Computer Sciences department in teaching Game Design and Development. However, the equipment and furniture in Micheels Hall 176—the primary lab used for all multimedia courses and beginning computer imagery—have not kept pace with the changes and are no longer capable of supporting instruction. The entire lab needs several major equipment upgrades or replacement.

Needs

- Computers and monitors and mice
- Computer desks
- Teaching station furniture
- Key card door access
- Data projector
- Server upgrade hardware
- HD video cameras
- Green screen

Computers

While both the University-owned graphics software and department-owned multimedia software used in the lab has been maintained at the most current versions, the computers have not been updated since the they were new in 2005 and they no longer meet the minimum system requirements for much of the software. Mac computers made the switch from PowerPC to Intel processors in 2006. The next version of the Adobe Creative suite is being developed exclusively for the Intel-based Mac and will not even run on the current PowerPC Macintosh computers. The current version is the last version of the Adobe software we can use on these computers, and the Adobe Suite is one of the primary tools used in art and design work.

3D modeling and animation places heavy demands on processors and video cards and the computers now regularly freeze when doing anything advanced. We have not installed the last two upgrades to Maya—the industry-standard software for 3D modeling—in order to maintain its basic functionality.

The lab needs new Intel Macs with high-end video cards that can support advanced 3D graphics. And, since some software necessary to the Game Design & Development courses is only Windows-based, having the potential to create a dual-boot lab capable of running both Macintosh and Windows software could be quite advantageous.

Monitors

The current 17-inch monitors are eight years old, five years beyond the expiration of their service agreements, and also beginning to fail. They are now more expensive to repair than replace. While 17" used to be a large screen, it is now considered quite small, especially for tool and palette-intensive graphics and multimedia software. 24 inches is now a standard monitor size. One additional significant factor requiring new monitors is the cable connections on the old monitors do not plug into current video cards without $90 adapters.

Desks and Teaching Station

The computer desks have been heavily used for the past seven years. Many are falling apart and no longer able to be repaired. New computer desks with integrated power and data management would also eliminate much of the existing cord clutter.

The teaching station is one of the very early built-in models. While it has managed to contain all the equipment of a modern mediated teaching station, it was not designed for it. Doors have been removed to dissipate heat. A new teaching station desk will bring it in line with other classrooms/labs on campus. Fortunately, most of the equipment of a mediated teaching station is already in place and does not have to be purchased.

Projector

High Definition is becoming the industry standard for video and animation, and the multimedia courses are reflecting that with students creating work in high definition. The existing data projector installed in the lab no longer displays fine detail and very light colors are lost, blowing out to white, and does not project in HD. Because of this demonstrations and student work cannot really be shown with the projector and must be displayed on individual monitors. However, an HD-capable projector is very expensive—approximately $14,000. While it would be nice to present student work in the correct format with good detail and color, a workable solution would be to replace the existing projector lamp more frequently. Lamps cost approximately $500.

Card Access

Before the conversion of the Micheels Hall computer lab into offices, the Ask5000 Help Desk monitored primary access to MH 176. After the conversion, access to the lab shifted by necessity to the door opening onto the Micheels Hall atrium. This door is currently unlocked and usually left open during building hours, leaving expensive equipment unmonitored in a very public space. A card reader and electronic door lock needs to be installed to secure the lab.

Server Equipment

The Department of Art and Design has been given an Apple Xserve server to supplement its existing Xserve server. However it does require a few hardware upgrades to connect to the network. The addition of this new server would allow for the department's image database management to be separated from student account management, and for redundancy in student accounts: a data safety element currently lacking. Both servers would utilize the same existing RAID array hard drive storage.

Video Equipment

With the increased sophistication of advanced courses and the move toward high definition, additional HD-capable video equipment is needed for students to use. Also, a portable green screen backdrop will tremendously increase the flexibility and possibilities of video production for a very reasonable cost.

IX. List of Courses to be Served by Lab/Classroom

DES-220	DES-374	DES-490
DES-321	DES-376	
DES-325	DES-377	
DES-370	DES-381	
DES-372	DES-385	

X. Statement on How Project Meets Needs of Students with Disabilities
(Please consult with UW-Stout Disability Services)