STUDENT COMPUTER FEES FY02

Department of Agricultural & Biosystems Engineering

The use of student computer fees for last year accomplished the following for the department:

1) Partial funding of the department’s computer support personnel, and his work in the departmental student computer labs.
2) Partial funding of the tape backup system and software that is used to backup the network servers that are used by the students in our department.
3) The purchase of software for use by our students in the departmental computer labs.
4) The purchase of miscellaneous items used by system support personnel for maintaining the computer labs: Documentation, Floppies and Backup Tapes.

Anticipated plans for using fees in fiscal year 2002-2003:

1) Continue partial funding of the department’s computer support personnel, including some technical training.
2) Continue partial funding of the department’s Autodesk software fee. This software is used in the instruction of AST 215.
3) Purchase of paper, toner, etc. For the student computer labs in Davidson Hall.
4) Any additional funds would be used for maintenance of items purchased with student fees, or saved to purchase larger items for the student computer labs (i.e. computers, software).

Department of Agronomy

How we used Student computer fees for year 2001.

We purchased 10 new Dell computers and upgraded 11. Bought printer supplies, paper and toner.
Purchased computer parts to build computers for the Graduate students, housed in room 3020 Agronomy.
The Baker Lab employees a student to sit in G528 for computer support Monday through Thursday evenings.
The Baker Lab replaced the switch and Ethernet hub, FPM came over to install wire mold the channel all the Ethernet wire so they cables would not be on the floor.

Short report of our anticipated plans for using the fees in fiscal year 2002-2003.

We would like to purchase new computers for the computer lab G528.
Paper and toner for printer in G528
We will be purchasing a slide scanner and flatbed scanner for G528.
Part of the money will be used to pay for upgrades, if needed, SAS software, and student personal.

Department of Animal Ecology

Room 106, Science II, is used principally by graduate students in the Department of Animal Ecology. Most of the expenditures were made to upgrade hardware during FY02. An unexpected equipment allocation allowed us to drastically upgrade the computing facilities, which led to a great increase in the use of this facility. We took advantage of last spring’s excellent discounts from Dell to replace all but one of the old computers and expand the number of available to graduate students. In addition, we hired a technician to upgrade our network connections so that all computers and peripherals could be connected. This same technician installed the computers, upgraded software and maintained the system. We also purchased a new printer, flatbed scanner and slide scanner to be used by all the networked machines. In all, we purchased and installed X new computers, including one new Apple machine. Expenses for this room totaled $xxxx. This is the principal computing venue for graduate students in the Department of Animal Ecology.
Department of Agricultural Education and Studies

The AGEDS Department provides fees for toner, paper and some telecommunications to all of our labs. Labs are open 8-5 Monday – Friday since the building is locked in the evening and weekends.

Funds this past year were used to maintain computers in both labs. Additional RAM was installed in the computers in the 206 lab to ready them for the migration to Windows XP Pro. All systems in the 206 lab were reloaded with all new software (Windows XP Pro, Office XP, Adobe Reader, etc) getting them ready for the move to the 220 lab. Minor maintenance was completed on the older P166’s in the 220 lab anticipating their replacement. A Novell License for 5.1 was purchased from another department to increase the capacity of the new Novell Server that was installed for student use. The new server has the capacity now for FTP and web pages. The AGEDS department received a grant from the College of AG to replace computers in the 206 lab with new P4’s and flat screens. Once the new computers (10) were in place the existing three year old P3’s were relocated to the 220 lab to replace seven-year-old p166 level systems. All systems now have the same software (operating system and applications). Additional software was purchased for the labs that were not covered under the Microsoft License Agreement or other Site License Agreements the department has with the University.

Future plans include the complete replacement of the 220 Lab with all new computers at the end of spring semester (10 systems). Due to the heavy use of printers in both labs, 2 new network printers will be purchased as well to replace one printer that is 5 years old and another that is greatly over worked. It is anticipated that the student Norton Antivirus Corporate server will have to be replaced this spring as well since the current server is 6 years old. Since the 220 Lab is a closed lab, the funds for the replacement will have to come from within the departmental student allocation. We anticipate 10 systems will run $17,000-$20,000 even with the bulk purchase discounts. Since printers are not included in the bulk purchase and additional $2,000 is anticipated for network level printers that can handle the volume from both labs. The Antivirus server cost will be approximately $3,000. Also due to budget shortfalls, the department is no longer in a position to supply toner, paper and telecommunications to both labs. Thus those expenses will need to be covered from the normal student fees.

Based on the available money, only part of this can happen so a priority list will be generated with student input – with the key goal to keep both labs functional and to maintain a small cash reserve to cover any other maintenance that will be required.

Department of Animal Science

Expenditure for 2001-2002 year

We have been saving student computer fees as much as possible over the past year for a major hardware upgrade. We plan to begin hardware replacements in our student computer laboratory in 124 Kildee in the next fiscal year and in 1 Kildee in the next fiscal year.

Our expenses over the past year fell into three categories. The biggest expense was for work-study students to serve as security monitors for evening hours for the computer labs. We purchased an operating system upgrade to Windows 2000 for student laboratory in 124 Kildee. Unfortunately we did not know at the time that ISU would be entering into the Microsoft Campus Agreement that would provide this upgrade without additional charge. We maintain two computers in 1 Kildee with specialized audiovisual equipment. Since the software settings are quite specific on these two computers, we decided to purchase two Centurion Guard kits as a trial to keep the software on these computers consistent. They worked great and we decided to investigate the purchase of Centurion Guard kits for all student computers in the laboratories.

We were fortunate enough to receive a grant from the College Pool to help partially cover the cost of a new server for file serving for the student lab. The server has been installed and is operational.

Anticipated Expenditures for 2002-2003 year

We plan to continue to save for computer system replacements in 124 Kildee (13 computers) and eventually in 1 Kildee (30 computers). We will plan to purchase the new computer systems beginning in the summer of 2003 and finish by the summer of 2004. We will continue to hire work-study students as lab monitors. We have already purchased Centurion Guard kits for all computers in the two labs that can be moved to new computers when they are purchased. We have upgraded the memory in computers in 1 Kildee from 128MB to 256MB. Finally, we will undoubtedly need to make some
software purchases and hardware repairs during the year. We hope to minimize any further expenses until new hardware
is purchased.

**Department of Biochem, Biophysics & Molec Biology**

During the fall of 2001, we used computer fees for replacement of the system hardware in room 1340 Molecular Biology
Building, and an upgrade of the hardware in room 0101 MBB to extend the useful life of those machines. The 19 new
Macintosh systems were delivered in late summer 2001 and were installed by mid fall of 2001 with Microsoft Office and
the Scout-distributed software.

In spite of the then-current standards-mandated purchase of AppleCare for each system (which added $199 to the cost for
each unit) we were still able to upgrade the system beyond that requested by
1) Increasing system speed from the 466MHz to 533MHz, increasing the memory from the 128MB to 256MB
2) Increase the monitor size from 17” to 19”. In the spring, all 19 machines were further upgraded to 512MB. All told,
this brought a fourfold-increase in processor speed, a sixteen-gold increase in system RAM, a five fold increase in
disk space (useful in the transition to OS X), and significant improvement in the displays available over the previous
systems in MBB 1340.

Also, all systems now have the ability to use some form of high-capacity removable storage media (250MB Zip or CD-
RW). The RAM replaced in the G4 Macintoshes was then used to upgrade the Dell systems in MBB 0101. The Dell
computers were upgraded from 256 MB to 11 of the 12 were fitted with an additional processor (for a total of two
processors per system). We also purchased a Dell laptop for check out by departmental instructors and students.

Our anticipated plans for the fees will be to pay Joe Anderson and the hourly students for the time they spend supporting
the two labs. The fees will also be used for paper, toner cartridges and other supplies to keep the lab running. With
special funding, we will replace a Project Vincent workstation in the Biochemistry Reading Room on the fourth florr of
the Molecular Biology Building with an IMac computer.

**Department of Economics**

**Use of FY02 student computer fees:**

Last year the department spent its student computer fee allocation exclusively for the support of the lab in Heady 64 and
68. This lab is open to all ISU students and is funded jointly by the Ag and LAS colleges. The lab is open 8am to 8pm,
Monday - Friday and contains 50 windows computers loaded with standard university-mandated software.

Using Ag CAC funds, paper was purchased for lab use for a total expenditure of $5,551.19. An additional $334 was
spent on ethernet access.

**Proposed use of FY03 student computer fees ($21,835.53):**

The economics department is actively working to upgrade the 4 year-old computers in this lab. One-third of the amount
needed has been procured from the FY03 LAS CAC proposal process. The other two-thirds will be asked of the Ag CAC
and central-pool CAC.

Fees will be used exclusively for the support of the lab in Heady 64 and 68. Approximately 1/2 of the money is
scheduled to be use for salary of student lab monitors ($10,140). Another $252 will be used to pay for Telecomm fee for
ethernet access. Repairs are predicted to be $500.

The remaining $11,000 will spent based on the success of the department's efforts in obtaining funds for computer
replacements. If funding is not successful, this money will be allocated for computer replacement. If funding is
successful, this money will be used to install two more overhead TV monitors to facilitate the teaching of classes in the
lab.

**Department of Entomology**

We used student computer fees to upgrade our student computing lab with a new Dell Optiplex GX240. Fees were also
used for paper and toner for the laser printer in the lab, for software upgrades, and to purchase some hardware such as a
SCSI cable and a slide scanner.
We plan to use student computer fees to maintain our student computing lab and teaching laboratory and to purchase expendable supplies such as paper and toner. We also plan to increase the capacity of the file server where students, faculty and staff store their temporary documents due to the increased size of files such as digital video files. We are also considering a duplexer for the laser printer in the student computing lab to reduce paper use.

We received a college grant to purchase a laptop for student presentations and seminars. We plan to purchase a Dell Latitude laptop with the grant.

**Department of Food Science & Human Nutrition**

The Department of Food Science and Human Nutrition used the student computer fees to maintain licensing agreements for software. The Minnesota Nutrient Data System is used in FSHN 361 (Human Nutrition Laboratory) for approximately 50 students annually. Students in other courses may also use this software for class assignments when the nutrient analysis software is left up to the student’s discretion. Prime Label is used in FSHN 403 (Food Laws, Regulations, and the Regulatory Process) for approximately 50 students annually. This software is used to educate and train on the food labeling regulations and process.

The Department of Food Science and Human Nutrition anticipates using the student computer fees to maintain licensing agreements for software currently used in courses. The computer committee is also considering purchasing software that supports sophisticated graphing from statistical analysis per student request.

**Department of Forestry (NREM)**

The student computer fees listed on the spreadsheet were used to purchase Global Positioning System receivers for use in Forestry 345, 446x, 454, and 546x. Forestry 345 (Natural Resource Photogrammetry and Photo Interpretation) gives undergraduates a brief exposure to GPS through a week of lectures and a 3-hour lab where students use the receivers to locate waypoints and collect basic spatial data. Forestry 446X/546x (Integration of GPS and GIS for Natural Resource Management) gives both undergraduate and graduate students extensive hands on experience in the use of GPS receivers to collect spatial data. The GPS receivers were used for approximately half of the 3-hour labs when the course was taught for the first time during spring semester. Twenty-four students were enrolled during Spring 2002. The Spring 2003 offering of the course is currently full with 36 students. A third lab section has been added to accommodate more students. Forestry 454 is a senior capstone course in which students work on a resource management for a client in Iowa. Several of the student teams used GPS units last spring to collect data for use in making recommendations to their clients.

With Animal Ecology and Forestry merging into the Department of Natural Resource Ecology and Management, student computer fee expenditures will be governed by the computer committee. At this time, specific plans have not been formulated for use of the fees, but I anticipate that they will be used primarily to provide hardware upgrades for computers used by both undergraduate and graduate students.

**Department of Horticulture**

Last fiscal year student computer fees were used to support the hardware and software needs of the computers in the main open student computer lab located in 156 Horticulture Hall. After the addition of new PCs in the lab, the fees were used to purchase security hardware, multimedia capabilities, and software licenses for these PCs. Also, toner and paper for the two-networked laser printers in the lab were purchased out of student fees monies (the horticulture department provides free printing services in its open student computer labs). With the addition of a CAC-funded LCD projector in 156 Horticulture Hall, the facility now supports classroom instruction.

Student computer fees monies will be used to upgrade the older imacs in the open student computer lab in 156 Horticulture Hall to add fire wire capability in order to support the digital video processing needs of instructors using the facility. PCs in 156 Horticulture Hall will be upgraded with 250 MB zip drives to address the needs of students using the facility. Monies will purchase paper and toner for the printers in the facility. SAS licenses for the graduate student computers in the department will be purchased from student fees monies as will software upgrades for computers in 156 Horticulture Hall. Monies will also be used to replace computer components that fail throughout the fiscal year. RAM upgrades for CAC-funded computer systems will also be purchases out of student fees monies.

**Department of Microbiology**
For FY2002 student fees went mostly towards general upkeep of the computers replacing broken hardware such as Monitors, ZIP drives and CD ROMs. Fees were also used to purchase paper and printing supplies for the lab’s laser printer.

For FY2003 student fees will go to completely upgrading the 205 Science I Student Lab. Fees will be used to replace the older computers with 8 brand new eMacs running OS X, which the OS X Microbiology server will be able to manage, maintain and secure. These new computers will be able to use the existing scanner and printer as well as provide students with access to their email and VINCENT home directories. The older Macintosh computers in the lab will be upgraded with more memory, larger hard drives, newer monitors and the OS X operating system. This upgrade will increase the number of usable machines in the lab from 10 to 12 allowing more students to use the machines at the same time.

The main reason for moving to all Macs from a mixed Windows/Mac lab is due to a critical piece of software used by the Microbiology Department as a teaching aid to its students. The software runs on both Macs and PCs, however on the PCs it only runs in Windows 98 not on NT, 2000, or XP. With the classic Macintosh emulator, machines running OS X can still use the software, so the decision was made to define the 205 Lab as the main undergraduate lab replacing the older Windows 98 machines with new eMacs. The goal is to provide as many students access to the software at the same time, while still providing for the general computing needs of the students (i.e. Internet, Microsoft Office, and printing).

A grant from the CAC was awarded to the Microbiology Department for a Thin Client Windows 2000 Lab. That grant will be used to set up a lab in Room 272A, providing Windows machines and a student server for the graduate students of Microbiology. Currently there are only two older Window machines and a laser printer in Room 272A. The CAC grant will be used to replace those older machines with 4 thin client terminals connected to a Windows 2000 Professional server. The server and thin clients will allow 4 students access to the Windows 2000 OS, Microsoft Office, the Internet and printing. In addition this new graduate student lab will decrease graduate student use of the 205 lab allowing more undergraduate students access.

In addition the student fees will go towards the upkeep of both labs as far as replacing broken hardware, upgrades, as they are needed, and printing and paper supplies.  

**Department of Plant Pathology**

To purchase one of four new computers to outfit a new bioinformatics facility for students, faculty and staff in Bessey Hall, per the granted Computer Use Fee proposal submitted by Plant Pathology. To purchase computer hardware accessories (keyboard, mouse) to maintain computer hardware in Plant Pathology student computer lab.

In 2003, we would use any available fees to purchase additional software (e.g. reference and bibliography management software) for the computers in the Plant Pathology Student computer lab, as well as any needed maintenace or repair of student computer facilities in the Department.

**Department of Sociology**

The department operates a computer lab with 11 work stations. This room is heavily used for teaching. This semester alone the lab has been reserved on more than 18 different occasions. Five different classes reserve the room for direct instruction that involves the computer in analyzing data. An example would be Dr. Steve Sapp’s Soc 512, Sociological Measurement, course.

To accommodate these classes we have lab hours form 8:00am to 5:00pm Monday through Friday. This monitoring requires a graduate student versed with specialized software so that they can assist others with assigned course work. The student computer fees were used to pay a portion of the salary and benefits of this graduate student.

We did not receive a special college grant last year (FY02).

Student computer fees will be utilized in 2002-2003 in the same manner as they were for 2001-2002. They will be used to partially pay the salary and benefits of a lab monitor.

We received a special college grant of #3480 for FY03. These funds were used to buy 10 licenses for a qualitative analysis package, Nvivo, and a wireless access point for general student access to the ISU Ethernet network.