Department of Agricultural & Biosystems Engineering

FY11 Summary

1. STUDENT COMPUTER FEE ACCOUNT REPORT

A. SUMMARY OF ACCOUNT BALANCE

<table>
<thead>
<tr>
<th>FY 10 STARTING BALANCE 7/1/2010</th>
<th>FY 11 STUDENT COMPUTER FEES</th>
<th>FY11 EXPENDITURES</th>
<th>FY 11 CASH BALANCE 6/30/2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8,460.33</td>
<td>$35,217.54</td>
<td>$31,385.58</td>
<td>$12,292.29</td>
</tr>
</tbody>
</table>

B. DETAILS OF PURCHASED ITEMS

All items were purchased for the Department of Agricultural & Biosystems Engineering. Hardware was purchased to support growing enrollment in TSM courses, specifically TSM 240 and 333. GPS computer based workstations (Ag Leader Technology Inc.) were added to room 130 Davidson. Computer based milling machine controllers (Erickson Machine Tools) were added to room 132 Davidson. A computer workstation (Dell) was added to room 207 Davidson to support lab management. Software products were added to 212 I Ed II (Tridaq) for enhanced CAD teaching and to 125 Davidson (Avatech Solutions) for visualization and design of plastic injection molding components. An additional laboratory computer technology expansion was completed which added valuable network connectivity for the CNC rapid machining centers. This included internet connectivity support (network port, CDW), Ethernet cable (ISU bookstore), real time control sensors (Sauer-Danfoss), and computer connectivity devices (Ladd).

C. DETAILS OF PERSONNEL EXPENDITURES

Personnel expenditures included partial support for a System Support Specialist (salaries and benefits total of $922.86). The position is System Support Specialist and is appointed on a one year appointment. The majority of the job duties pertain to management of the student computer labs with both hardware and software responsibilities. The majority of the job focus is software related issues. This position also handles student users on the IASTATE domain.

D. EXPENDITURE LIST

All FY 11 expenditures related to the ABE-CALS student computer fee account are summarized in the attached Excel spreadsheet.
NARRATIVE

ABE continues to utilize student computer fee dollars to make a direct impact on the quality of student computing and computer interaction within the department. During FY11 this impact came in the form of direct support for computing equipment in two specific ABE classes, TSM 240 and 333. Enrollment in these classes continues to grow and the reinvestment in computing technologies ensures that the student experience does not diminish as a result of higher enrollments. For example, the enrollment in TSM 333 has grown from 22 students in 2008 to 100 students in 2011. Replicated computing stations ensure that lab groups remain small and well suited for effective learning.

As in past years, the cash balance and new computer fee funds will be used based on faculty and student proposals. ABE faculty members will be invited to submit proposals to the ABE-Computer Education Committee. Students are also encouraged to submit proposal through the student members of the ABE CEC. Funding decisions will be made by the committee based on an evaluation of the impact of the proposed purchases on CALS students in ABE. This process has worked very well in the past and we expect it to be successful in the new fiscal year.

ABE has done an excellent job of keeping cash balances low over the past few years. ABE recently received news that it will be receiving a new building with a likely move-in date in FY14. In order to ensure that this new facility has the latest in computing technology, ABE will be entering a three year savings plan to accrue approximately $40,000 by the opening of the department’s new home. This will require ABE to hold back approximately one-third of its yearly student computer fee allocation. This money will then be spent to facilitate new technology in student labs based on proposals by faculty.
Department of Agricultural Education and Studies

FY11 Summary

Income and Expense Report

Income:

Balance Forward: July 1, 2010 $55,682.99
Trans in: Student Computer Fees $29,779.6
Trans in: CALS Grant Allocation $27,900.00
Total Income: $113,362.62

Expenses:

Hardware Purchases $18,245.88
Software & Software Licenses $2,636.50
Expendable Supplies $5,011.56
Network Access $1,008.00
Other Services or Fees $1,997.29
Total Expenses: $28,899.23

Cash Balance: June 30, 2011 $84,463.39

Encumbrances: $59,004.20

Uncommitted Balance: June 30, 2011 $25,459.19

Several areas received technology or technology upgrades this year. New technology consisting of computer and ceiling mounted projector were installed in a conference room that is used for students during various recruiting events for prospective students as well as for current student presentations. The AGMech classroom/lab received additional technology to allow for student presentation capture during classes. The department received a CALS TAC grant to purchase a virtual welder for the AGMech Lab which required matching funds (encumbrances).

The AG450 classroom/lab received additional laptop computers and other minor technology repairs/upgrades to enhance the classroom. New printers were added in some areas. The AGEDS teaching classroom/lab received a complete technology upgrade consisting of new projectors, cameras, mics, and other electronic components to enhance student presentations. Additional Ethernet switches, cables, and power strips were needed to relocate graduate students during the Curtiss Hall construction on second floor. Additional funds were spent on hardware maintenance and software renewals.

Future Plans

Additional enhancements will be done in the Teacher Education area. The AG450 computer lab will be evaluated for replacement. Software licenses will be maintained. Additional printers
will be evaluated for replacement. We will continue to maintain a suitable clash reserve to cover any unplanned maintenance or equipment needs.

July 1, 2011 Balance $25,459.19
Estimated income $25,000.00
Estimated Expendable Supplies $3,500.00
Estimated Software $2,700.00
Estimated Network Access $1,008.00
Estimated Other Services or Fees $1,200.00
Estimated Hardware 12,000.00
Total Estimated Expenses $20,408.00
Estimated Balance June 30, 2012 $30,051.19
Department of Agronomy

FY11 Summary
Student Computer Fees helped to support a number of areas within the Department of Agronomy in FY11.

We have continued the funding of the supplies needed for rooms Agronomy computer lab G528 which include paper and toner for the color printer. We have purchased SAS, MATLAB and AgLeader SMS software for the computers in the G528 computer lab.

With the Student Computer Fees the Agronomy department was able to upgrade rooms G533 the classroom used for Agron 212 course. The upgrade included a projector, powered speakers, projection screen, and necessary control equipment, installation of equipment by Classroom Technology.

Computer Student Fees has helped the Agronomy department continue to support Agronomy’s application server. It is increasingly used by our Masters Distance education program to provide students with access to required programs and files. Programs such as SAS and ArcGIS will be continued to be licensed for use on the computer.

We were able to purchase a new instructor teaching computer for 1102 classroom.
Department of Animal Science

FY11 Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance (July 1, 2010)</td>
<td>$125,520.11</td>
</tr>
<tr>
<td>Income:</td>
<td>$80,028.58</td>
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<tr>
<td>New student fees</td>
<td>$74,557.25</td>
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<tr>
<td>Transfers from print accounting</td>
<td>$5,471.33</td>
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<td>Expenses:</td>
<td>$89,119.87</td>
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<tr>
<td>Hardware</td>
<td>$27,240.96</td>
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<tr>
<td>Software</td>
<td>$759.00</td>
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<tr>
<td>Expendable Supplies</td>
<td>$17,632.85</td>
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<tr>
<td>Network Access</td>
<td>$9,422.80</td>
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<tr>
<td>Support personnel</td>
<td>$7,104.26</td>
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<td>Security and Protection</td>
<td></td>
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<tr>
<td>Course Development Personnel</td>
<td>$20,820.00</td>
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<tr>
<td>Graduate Student Tuition</td>
<td>$3,560.00</td>
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<tr>
<td>Other Services and Fees</td>
<td>$2,580.00</td>
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<tr>
<td>Ending Balance (June 30, 2011)</td>
<td>$116,428.82</td>
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</tbody>
</table>

Narrative Reports:

FY 2010-2011 Summary:
The largest expense category ($27,246.96) was for hardware purchases. A major part of this expense was for two new servers to support the two student computer labs ($12,170 + $149.26 + $707). The new servers greatly upgrade our capabilities and helps us prepare for a new set of lab computers expected in the next year. Another significant expense included the addition of multimedia capabilities to two classrooms (305 Kildee and a classroom in the horse barn) and the support of classroom media (wireless microphones for classroom recording, DVD/VCR players and various cables). A new technology purchased was an electronic whiteboard with an attached printer for use by the physiology classes. Partial support was provided to upgrade computers for 3 faculty members and a computer support staff member that are heavily involved in teaching. We began a rental arrangement with ISU printing services for a copier that is used as the main printer in one computer lab with scanning and copying capabilities. Because of student input, we decided to subsidize the cost of printing and copying and provide free scanning. We continue to rent virtual server space from ITS but expect to replace this with virtual server space on our new lab servers in the next year.

The second largest expense category ($24,380.00) was the combined graduate student stipend ($20,820) and tuition charges ($3,560) for a computer science graduate student that continues to work on a software development project in Animal Science. The simulation project should be completed and the student will be graduating in the next fiscal year.
The third largest category of expenses was expendable supplies ($17,632.85). Most of his expense is in support of printing costs which have increased significantly through a deliberate increase in the subsidy for the cost of printing in the student labs. Minor expenses include replacement batteries for uninterruptable power supplies, UPS, for lab servers and general maintenance of the student labs.

The fourth largest category for the year was for Network Access ($9,422.80). Expenses increased dramatically in this category over last year as the result of a plan to provide multiple high speed wireless access points (802.11n) throughout Kildee Hall where students might be present but university provided wireless was not present.

The fifth largest category for the year was work-study students that help with security and maintenance of the student computer labs ($7,104.26). Most of this expense was for student lab monitors to provide security during the evening hours. The amount is above previous years because we were not able to hire all work study students this year.

The sixth largest category was fees and other services ($2,580). Expenses included electrical work to relocate electrical service for the two rooms with multimedia installations and the installation of the multimedia equipment. Other expenses included the repair of a classroom projector and the university charges for hazardous materials.

There was an unusually small expenditure for software this year with only $759 expended on license updates for virus protection and software to allow metered software in the lab.

**Plans for next year:**
We have already purchased an updated software license for our Adobe software titles at over $11,000 for the lab. A departmental committee with half of the members being students met in spring semester to brainstorm ideas and establish priority uses for student computer fees. The top priority that emerged was the replacement of the 45 computers in the student labs in spring 2012. During the summer, we deployed a second multifunction (print, scan, copy) device in the computer lab in 124 Kildee. If the wireless access performs as expected, we have plans to add a third device for general access in another location in Kildee. We continue our program of offering cost sharing dollars for computer purchases by teaching faculty when their contribution to the instructional program can be justified to the department chair. We are continuing to identify appropriate expenses that will benefit students without spending the student computer fees unwisely. A major upgrade has been proposed for the multimedia equipment in a classroom if funds are available. Our college decided to participate in the MCA program for students this year. If the college decides to continue enrollment in the MCA program, fewer dollars will be likely be available for the department. We built up a balance in our account as the result of a rapid increase in student numbers over a few years with matching increases in expenses. Because of the increased network costs and printing costs initiated during the past year, our normal annual expenses were larger than our annual income last year. With the purchase of 45 new computers planned for this year, our balance will be reduced significantly over the next year.
Department of Biochemistry, Biophysics & Molecular Biology

FY11 Summary
The mission of the department of BBMB is to maximize the learning experience of our students in the molecular biosciences. Increasingly, this training relies on sophisticated instrumentation controlled by workstations with software tools that allow students to ask smarter questions that connect concepts in chemistry, biology, physics and mathematics. On this basis we completed the following purchases:

- We purchased an Optiplex 990 minitower (DMI Dell) dedicated to connecting to the new Cary 50 to bring our total to 9 units which enables us to accommodate 18 students per section located in 1236 MBB. We also purchased an Optiplex 980 minitower (DMI Dell) dedicated to the biotek plate reader purchased last year located in 1256 MBB.
- We purchased an imaging system (BioRad Laboratories) as image capture, storage and analysis are integral to experiments in molecular biology. This upgraded the undergraduate teaching lab (Room 1241, Molecular Biology Building) with a modern, computer-driven imaging system that replaced a system installed in 1995.
- A projector (B&H Phot-e-video.com) and replacement lamp module (Amazon.com) were purchased to replace the prior projector located in 1340 MBB to be used for courses and student presentations.
- Symantec Endpoint Licenses (CDW Government) and Snow Leopard Mac OS server operating system (University Bookstore) were purchased for computers located in 1340 MBB. Symantec Endpoint licenses provide anti-virus protection for the computers located in the student computer lab. Snow Leopard server OS is utilized for maintenance and deploying disk images to the computers located at 1340 MBB simultaneously. Funds were used to upgrade the surveillance computer by purchasing PCMover, Windows 7 Upgrade Assistant software (CBI Cleverbridge INC).
- A purchase was made to replace a wall mount for a LCD monitor located in the teaching lab - 1236 MBB (Syx*Tigerdirect.com). A network switch and USB 4GB Flash drive (newegg.com) were purchased for the teaching lab located in MBB 1236. The network switch allows for faster connection to the network for students. The flash drive is for data storage for students for the teaching lab. A serial port adaptor (DMI Dell) was purchased located in 1256 MBB.
- A wireless router (newegg.com) to improve the wireless connection for students and the instructor was purchased and is located in MBB 1237. A Hitachi internal hard drive for the time capsule (newegg.com) to back up the disk image for the Snow Leopard was purchased and is located in MBB 1139.
Balance carried forward from previous fiscal year $43,261.94

Income

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>College Pool allocation</td>
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<tr>
<td>Augmented fee income</td>
<td>$ -</td>
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<tr>
<td>Total Income</td>
<td>$12,070.54</td>
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</tbody>
</table>

Expenditures

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>$ 9,885.50</td>
</tr>
<tr>
<td>Software</td>
<td>$ 1,787.47</td>
</tr>
<tr>
<td>Expendables</td>
<td>$ 670.07</td>
</tr>
<tr>
<td>Network Access</td>
<td>$ -</td>
</tr>
<tr>
<td>Security and Protection</td>
<td>$ -</td>
</tr>
<tr>
<td>Support Personnel</td>
<td>$ -</td>
</tr>
<tr>
<td>Course Development Personnel</td>
<td>$ -</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>$12,340.04</td>
</tr>
</tbody>
</table>

Balance carried forward to next fiscal year $42,992.44

Plans for 2011-2012

We plan on purchasing:

1) A second Nano-drop to reduce the waiting time for students, Cost ~ $8,500

2) Floor shaker, Cost ~ $16,000

3) Thermo cycler, Cost ~ $6,800

4) Scanner for students computer lab, Cost ~ $600

5) I-Pads or Androids for student check out, Cost ~ $500-$600 each

6) Upgrade computers for student reading room on 4th floor, Cost ~ $4,000
Brenton Center Technology Advancement Committee Report

FY11 Summary

Income and Expense Report

Income:
Balance Forward: July 1, 2010 $1,684.73
Total Income: $1,684.73

Expenses:
Total Expenses: $0.00

Cash Balance: June 30, 2011 $1,684.73

No funds were spent during this year.

Future Expenses:
The current balance of $1,684.73 will be spent to enhance classrooms in the Brenton Center during this next fiscal year.
Department of Ecology, Evolution & Organismal Biology

FY11 Summary
1. Account Details:
   a. 2010-2011 Account Balance:

   Beginning balance (July 1, 2010): $11,106.82
   Income: 14,427.95
   Expenditures: 10,878.94
   Ending Balance (June 30, 2011): 14,655.83

   b. Detail for purchased items
      (see attached spreadsheet)

2. Narrative Report:

   Impact on student learning:
   EEOB maintains a collection of portable computers (presently about 85) and desktop machines
   (about 15) for student use in Biology and EEOB classes, provides public access computers (6) in
   the lobby of Bessey Hall, provides some desktop machines for EEOB students, and maintains an
   array of wireless network access points throughout the classrooms and public areas of Bessey
   Hall. Introductory biology and ecology labs use our computers very extensively. In 2010-2011,
   we replaced two MacBook computers used in biology labs and purchased two new computers
   for graduate students, plus purchased four printers and miscellaneous repair/upgrade items.
   We purchased software for ecology labs (a package emphasizing non-parametric statistics, not
   easily accessible in existing packages on campus) and biology labs. Expendable supplies were
   toner and paper for the grad student and biology labs.

   Planned 2011-2012 expenditures:
   Biology has recently added lab sections of introductory biology and ecology to help
   accommodate increasing enrollment. In addition to updating some of our oldest computers
   (purchased in 2006), we plan to increase the total number of computers, by adding another 60
   portables (with funding from a variety of sources). In 2010-2011, we plan to purchase
   approximately 15 computers @ ~$1000 each, plus some miscellaneous equipment totaling
   $500-1000, from this account. We will also replace some printers and add some new ones
   (about $3000).
Department of Economics

FY11 Summary

During FY 2010-2011, Economics used CAC funds to purchase new thin clients and servers, as well as software, networking, printing, and other equipment and products to support student learning. Economics is presently undertaking a multi-stage computer infrastructure project to switch student computing from standalone workstations to a thin-client/terminal server infrastructure. This project was initiated in FY 2009-2010 and will be continued in FY 2011-2012. The new infrastructure offers substantial maintenance cost savings and allows for a more efficient utilization of hardware and software than the old network of standalone workstations. It also benefits the students by enabling easy access to all software needed for class-work and thesis research, either from thin clients and other ISU-owned computers on campus or from students’ personal laptops.

### FY 2010-2011 Beginning Balance

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>New CAC fees (income)</td>
<td>$32,985.88</td>
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### Hardware Expenditures

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<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Thin clients</td>
<td>$11,898.75</td>
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<tr>
<td>Monitors</td>
<td>6,857.00</td>
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<tr>
<td>Lab printer upgrade</td>
<td>321.39</td>
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<tr>
<td>Storage server components</td>
<td>3,659.97</td>
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<tr>
<td>External storage drive</td>
<td>2,507.64</td>
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<tr>
<td>Hardware maintenance agreements</td>
<td>325.00</td>
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<tr>
<td>Sliding rails for student rack servers</td>
<td>412.47</td>
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</table>

### Software Expenditures

<table>
<thead>
<tr>
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<th>Amount</th>
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<tbody>
<tr>
<td>Matlab licenses</td>
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<tr>
<td>Gauss upgrade</td>
<td>1,342.50</td>
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<tr>
<td>Windows and Adobe licenses</td>
<td>1,836.00</td>
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### Networking Expenditures

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Recurring Data Service</td>
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<tr>
<td>Recurring Telecomm Service</td>
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### Printing Expenditures

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<th>Amount</th>
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<td>Paper</td>
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<tr>
<td>Toner</td>
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### Support Personnel

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<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly wages and benefits</td>
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Other Expenditures

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Administrative Overhead</td>
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<td>Printer Repair</td>
<td>263.03</td>
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<tr>
<td>Hazardous Materials Surcharge</td>
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Total Expenditures                  $39,864.27

FY 2010-2011 Ending Balance         $44,560.70

2011-2012 Plan

During FY 2011-2012, Economics will continue to expand the thin-client/terminal server infrastructure. New terminal servers will be purchased. New student Linux servers will be purchased. Additionally, thin-client computers will be purchased to access these new servers.

Beginning Balance                   $44,560.70

Anticipated FY 2011-2012 Fees        $33,000.00

Anticipated Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 new terminal servers</td>
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<tr>
<td>2 new Linux servers</td>
<td>$15,000.00</td>
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<tr>
<td>10 thin clients</td>
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<tr>
<td>Software licenses</td>
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<tr>
<td>Hourly lab monitors (salary &amp; benefits)</td>
<td>$3,000.00</td>
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<tr>
<td>Networking</td>
<td>$750.00</td>
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<tr>
<td>Printing</td>
<td>$2,000.00</td>
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</table>

Anticipated Expenses in FY 2011-2011 $40,750.00

Anticipated Ending Balance           $36,810.70

In FY 2012-2013, student computer labs in Heady 64 and 68 are expected to be upgraded. Upgrade will include a remodel of the physical space. A substantial fraction of FY 2011-2012 remaining balance will be spent on this upgrade.
Department of Entomology

FY11 Summary
We used student computer fees to maintain and upgrade our student computing laboratory and teaching laboratory. In the student computing laboratory, we entered into a concurrent software licensing agreement in cooperation with Plant Pathology and Microbiology for the use of Adobe CS5, EndNote X4, and SigmaPlot software. We replaced the Macintosh computer in the student computing laboratory with a new Mac Pro suitable for doing bioinformatics work since more entomology students are taking bioinformatics courses. In the teaching laboratory, we replaced the projection switcher and the video projector bulb. Maintenance costs for the student computing laboratory included paper and toner.

Our grant proposal (with NREM) to Ag-TAC to refurbish 30 laptops that are rotating out of the NREM portable classroom/laptop cart was funded. We are in the process of refurbishing these laptops to check out to individual students, who will have access to the concurrent software licenses mentioned above.

FY11-12 Plans
We plan to use funds from student computer fees to maintain and improve the software and hardware in our student computing laboratory and teaching laboratory. Our balance is relatively low, and we do not anticipate making major purchases in the upcoming year. We had planned to refresh the PCs in the student computing laboratory but will postpone that for a year.

Carryover Balance
Entomology has a relatively small carryover balance ($3,534), which we are holding in preparation for a refresh of hardware in the entomology student computing laboratory in FY12-13.
Department of Food Science & Human Nutrition

FY11 Summary
Funds were used to purchase 1 Dell projector for use in FSHN classrooms to improve visibility of student presentations and faculty lectures for students. Presentations by instructors and students are enhanced by fully functional screens, projectors, and audio equipment.

Partial funding of 6 laptop computers for use in teaching was supported. Laptops are checked out to faculty exclusively for teaching purposes.

Network access was increased in the Food Sciences Building with the purchase of a wireless adaptor. Undergraduate students use this laboratory and had reported limited access to network resources.

FY12 Plans
Additional funds were used for supplies and maintenance directly related to CAC equipment previously purchased, i.e. mice, video cameras, etc.

Expenditures next year will include replacement of some laboratory desktop computers (rotating schedule) and additional supplies and maintenance of current equipment.

Remaining funds will be used next year for replacement desktops and the FSHN committee will also evaluate if any further media equipment upgrades are needed in FSHN classrooms.
Department of Genetics, Development, and Cell Biology

FY11 Summary
Narrative of 2010/2011 expenses: The CALS CAC funds were used to support three lab classes that are foundational to multiple life sciences majors: Biology 211L, Biology 212L and Biology 313L. The expenses were primarily hardware, including printers, MacBooks, and a monitor.

Narrative of plans for 2011/2012 CAC fees: The enrollment for introductory Biology courses has increased approximately 20%, and we plan to use the CAC fees to enable computer support for new class sections. This will include additional computers for Biology 211 and Biology 212 labs (expenses shared with EEOB).
**Department of Horticulture**

**FY11 Summary**
During these years of budgetary reductions, we are very grateful to receive student computer fee monies that are essential to our continued support of extensive student computation activities in the Department of Horticulture.

During the flooding of Horticulture Hall in 2010, we lost much of our labs’ printing consumables stored in the flood zone. Consequently, all printing consumables purchased with CAC monies are now stored on the second floor of Horticulture Hall (well out of the reach of flood waters).

On April 4, 2011, a seminar was presented in accordance with the provisions of the FY09 CAC grant that funded our Polycom-based videoconferencing cart.

**Request 1: Expenditures of CAC Fees in FY11 by Department of Horticulture**

<table>
<thead>
<tr>
<th>Purchase Category</th>
<th>FY11 Expenditure Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>$ 20,871.19</td>
</tr>
<tr>
<td>Software</td>
<td>$  6,488.43</td>
</tr>
<tr>
<td>Expendables</td>
<td>$  1,515.96</td>
</tr>
<tr>
<td>Network Access</td>
<td>$  0.00</td>
</tr>
<tr>
<td>Security and Protection</td>
<td>$  0.00</td>
</tr>
<tr>
<td>Support Personnel</td>
<td>$  0.00</td>
</tr>
<tr>
<td>Course Development Personnel</td>
<td>$  0.00</td>
</tr>
<tr>
<td>Graduate Student Tuition</td>
<td>$  0.00</td>
</tr>
<tr>
<td>Other Services or Fees</td>
<td>$  647.02</td>
</tr>
<tr>
<td><strong>Total FY11 Expenses</strong></td>
<td><strong>$ 29,522.60</strong></td>
</tr>
</tbody>
</table>

Please see the attached spreadsheet that itemizes Department of Horticulture expenditures for FY11.

**Request 2: How CAC Fees Were Used in FY11 by Department of Horticulture**

This year, we received a grant in the amount of $11,055.00 from the College to fund the purchase of a high definition digital video processing station that is located in 260 Horticulture Hall. The equipment has been purchased and set up, and students have already used the new technology twice during this summer.

Nearly 70% of this department’s inventoried technology is used by students or is used to teach and/or support students. Students now use technology located in rooms 5, 14, 54, 109, 151, 156, 160B, 233, 251, 259, and 260 Horticulture Hall. By June 30, 2011, our System Support Specialist had completed the upgrades to Windows 7 and/or Snow Leopard on 52% of this department’s student computer systems. These upgrades required RAM and hard drive
purchases for the upgraded student computer systems. From the lessons learned during the “Flood of 2010” we now image our student computer systems using Passport hard drives for disaster recovery.

ITS discontinued its financial support of the campus-wide McAfee software site license. Consequently, we have purchased Symantec Endpoint licenses for our student computers. We also renewed various software licenses for products currently installed on student computers. Malwarebytes Antimalware Pro software was purchased and installed on our student computers in an attempt to reduce malware outbreaks. Infection rates have declined by 31% since the deployment of this software on student computers.

We activated the multipoint feature of the Polycom device on our video conferencing cart, so that multiple teachers/sites can interact with students.

We substantially expanded the resources in two technology resource centers located in 160B and 260 Horticulture Hall, and the System Support Specialist now allocates 10% of his weekly workload labor in the support of these two locations and their student traffic.

Expenditures’ impact on student learning: During FY11, the department purchased additional technology and software to assist students with digital media content used in their internship reports, classroom projects, and e-portfolios. These new technologies and software programs continue to empower students to work effectively with the social networking technologies and other digital content services currently offered on campus.

Request 3: How CAC Fees Will Be Used in FY12 by Department of Horticulture

Our June 30, 2011 ending balance was $565.89.

The merger of the Department of Horticulture with the Department of Agricultural Education and Studies will create a new IT-related support structure. Our System Support Specialist will be tasked with the support of the larger entity, and CAC monies will play a very important role in this expanded support.

We plan on paying for license renewals for software programs, such as Symantec Ghost and Centurion Technologies’ Smart Shield and Mac Shield, that are used to image and to secure our student computers. We will be renewing the Malwarebytes Antimalware Pro software licenses for our student computers.

Hard drives and RAM upgrades will be need to be purchased and installed in existing student computers to extend their useful operational life spans when they are upgraded to Snow Leopard and/or Windows 7 operating systems. Passport hard drives will be purchased for imaging and disaster recovery of student computer systems.
We need to replace the obsolete student computer systems that are in our main computer lab located in 156 Horticulture Hall. We would like to submit a CAC grant application for this upgrade, since our yearly CAC funding allocation is insufficient for this project.

Expenditures’ impact on student learning: During FY12, the department’s Technology Committee will continue to identify expenditures that will benefit the most students. The biggest expense (and impact) on student learning will be the upgrades to new computer hardware in 156 Horticulture Hall that will translate into greater functionality for our student populations.
Department of Natural Resource Ecology and Management

FY11 Summary
We used student computer fees to maintain and upgrade our student computing laboratories. The computers in the student reading room were replaced with high end workstations for GIS work and a similar workstation was placed in the graduate student lab for higher powered statistical and GIS work.

Students were employed as lab monitors so that the main NREM undergraduate computer lab would be open until 9pm on M-Th for students to work on school projects and assignments.

Paper and toner were purchased for teaching purposes in the classroom; this allows students to be able to print projects in class or labs sessions without involving additional costs to the student.

Wireless internet was upgraded in areas with high wireless usage to 1GB compatible Wireless access points. So far this switch has relieved a previous bandwidth bottleneck.

Our grant proposal (with ENT) to Ag-TAC to refurbish 30 laptops that are rotating out of the NREM portable classroom/laptop cart was funded. We are in the process of refurbishing these laptops to check out to individual students.

FY11-12 Plans
We plan to use funds from student computer fees to maintain and improve the software and hardware in our student computing laboratories and teaching laboratory. Our balance is relatively high and there are plans this year to replace all the laptops computers used for teaching purposes (56 laptop computers), to replace 17 computers and 1 B&W laser printer in the undergraduate computer lab and to replace 3 computers in the graduate student computer lab.

Money will also be used to purchase concurrent licenses for Adobe Software suites, Sigma Plot and Endnote (in a partnership with Entomology), SAS and IATiger software licenses for teaching purposes. We will continue to employ student lab monitors so that the NREM undergraduate computer lab will be able to remain open in the evening hours.

Carryover Balance
NREM has a relatively large carryover balance ($92,544.85), this money is being spent in July 2011 to purchase 48 new laptop computers for classroom teaching usage and 17 new desktop computers for replacements in the NREM undergraduate computer lab.
Department of Plant Pathology

FY11 Summary
We used student computer fees to maintain and upgrade our student computing laboratory in 328A Bessey Hall and to upgrade our teaching laptops. This year we entered into a concurrent software licensing agreement in cooperation with Entomology for the use of Adobe CS5, Thomson-Reuters EndNote X4, and SigmaPlot software. The agreement allows us to make the software available to students for far less than purchasing individual licenses.

FY2011-2012 Plans
We plan to use funds from student computer fees to replace the computers in the Plant Pathology student computing laboratory (328A Bessey) with new Dell Optiplex 990 models. Screens will be upgraded from 17” screens to 24” screens, which will enable students to have a better computing experience. We will maintain our licensing agreements and provide SAS on these computers.

Carryover Balance
Plant Pathology is carrying a balance that will be used to refresh our student computing laboratory hardware in FY2011-12 and maintain a $3000 emergency reserve.
Department of Sociology

FY11 Summary

Beyond the traditional expenditures for printing, software licensing and maintenance costs for the 409 East Hall Graduate Lab and the 64/68 Heady Hall Computer Lab we did a major overhaul of the East Hall lab’s computing resources this year.

The East Hall lab had all six computers replaced along with a new shared printer and a newer WiFi Access Point. We had been saving funds for this purpose and these purchases spent down our account considerably.

We also continued expenditures to support the “free” printing in the 4th Floor East Hall Graduate Computer Lab.

Future Plans Narrative:

Future funds will serve two main purposes in the next fiscal year. Our primary goal for CAC funds is, as usual, to maintain and supply our existing facilities. Secondarily we will be doing some expansion of capabilities in the labs.

We will be upgrading an existing Ethernet jack in the East Hall lab to 1GB this year in order to fully utilize the new, faster “N” protocol access point that was recently purchased.

There have been some informal inquiries from students for a couple of new items for the labs. One idea is to setup a dedicated high end workstation lab machine for more graphic intensive work. The other is a request to get some type of scanning and copying capabilities for students in the computer lab. The Sociology CAC Committee will explore the possibility of purchasing items this year that will fill these two needs.

We intend to continue expenditures to support the “free” printing in the 4th Floor East Hall Computer Lab.

Any carry over funds will be saved for replacing equipment in the 409 East Hall Lab in the future.
Microbiology

FY11 Summary

1. Student Computer Fee Account Details
   a. Summary of account balance
      i. Beginning fiscal year balance (July 1, 2010) $12,559.16
      ii. Income for fiscal year (July 1, 2010 – June 30, 2011) $11,973.80
      iii. Total expenditures for fiscal year (July 1, 2010 – June 30, 2011) $10,839.86
      iv. Ending Balance (June 30, 2011) $13,693.10
   
   b. Detail for purchased items can be found on attached spreadsheet:
      “College of Agriculture & Life Sciences Computer expenditures FY 10-11: Microbiology Program” file name [Stud Comp Fee spreadsheet-microbiology FY11]

c. Detail for personnel: N/A

2. Narrative Report
   a. Explain or elaborate on expenditures and how they impact student learning
      i. for the past year (July 1, 2010 – June 30, 2011)

Based on a computer survey of students enrolled as microbiology majors and enrolled in large service classes in microbiology, our major thrust has been to upgrade the hardware and software used in the student computer lab (room 205 Science 1). To that end we reconfigured the software on the existing computers in the student lab. We were able to add access to SAS (statistical software), Sigmaplot (graphics software), Adobe CS5 (photo shop & acrobat), and Endnote (citation software) to all computers in the student computing lab. This was due to also purchasing K2 software which allows monitoring shared software license use. This will allow both undergraduates and graduate students to utilize software without purchasing cost prohibitive licenses for individual computers. Over the past year we have added 3 new iMacs based on the number of students who responded to the survey and observation of the number of times iMacs were used over PC computers. We have purchased one new scanner to use with the iMac machines. We also purchased 1 new Dell Minitower to use for setting up 6 additional Dell PC computers by the end of the summer and one upgrade for a failed hard drive that was no longer under warranty. A new D-link router and Ethernet cords were purchased to network the computer lab. These laboratory upgrades will enhance students’ technical abilities for creating laboratory reports, brochures, newsletters, and homework needed in various classes.

For student teaching laboratory we have upgraded the Dell PC to a machine that is faster and able to utilize upgraded software to capture and project images of live laboratory techniques on the ELMO and from the camera mounted on a microscope. This will enhance an instructor’s
ability to demonstrate techniques and facilitate student learning the techniques through visual real-time demonstrations.

Student oral presentation skills are emphasized in upper level microbiology courses, graduate student courses and seminar. To strengthen their oral presentation skills we have purchased several laser presenters that allow a person to move around the room and yet still control power point. The high speed wireless routers have stabilized weak wireless signals on both the first floor conference room and third floor to allow wireless file transfer and internet access at locations frequented by undergraduate and graduate students.

ii. plans for the next year (July 1, 2011 – June 30, 2012)
Plans for fiscal year 2012 will include an upgrade of the remaining PC computers (7) in the student computer lab.

b. If there is an unspent balance (carryover funds), please explain plans to expend funds and to reduce unspent balances.

Although the end of June 2011 shows a positive balance, we have purchased and installed 5 more new Dell PC computers (total cost $7,990) based on the success of the image with the Dell Optiplex purchased in June. The remaining “older” PC’s will be 3 years old next June and be replaced at that time.