

MATTERS FOR ACTION:

Charges for Technology Report (formerly Technology Fees)

RECOMMENDED ACTION:

No action required – report only.

EXPLANATION:

Presented by Tony Frank, Vice President for Research and Information Technology.

Charges for Technology provide students with access to state-of-the-art equipment and software and, thus, opportunities that will help them succeed in their educational pursuits. The implementation of a college Charge for Technology has required extensive student input and, as referenced, students are responsible for Charges for Technology through committees within each college comprised of majorities of students. Charges are used to purchase computer hardware, software, laboratory equipment, maintenance, financial aid and hourly employees.

There are more than 60 computer labs on campus, many of which are directly supported by Charges for Technology. Hours of operation and utilization by students continue to increase, as detailed in the attached report. The main labs and the student populations that have access to them are listed in the table below.

Consent Item \_\_\_\_\_

Action Item \_\_\_\_\_

Report Item  X

<i>Undergraduate Computer Labs</i>	
<i>Student Units Served</i>	<i>Computer Lab</i>
University-wide	Computer Assisted Writing Lab
	CNS MacLab (Weber)
	CNS/Residence Life Computer Lab – Ingersoll Hall
	Intra-University (Open Option) Computer Labs - 2 <sup>1</sup>
Agricultural Sciences	UG Ag Sci Computer Labs – 4
	Graduate Ag Sci Computer Labs – 5
Applied Human Sciences	CTTEC Lab
	Management Technology & Construction (also available for Engineering Auto-CAD students)
	Education Computer lab
	Gifford Computer Lab
	Moby Computer Lab
Business	Rockwell Computer Lab plus 2 classrooms
Engineering	Engineering Classroom Lab (A-104)
	LM Design Lab (B-203)
	Allison Lab (Allison E104)
	Anderson Lab (Glover 220)
	ERC Computer Lab
Liberal Arts	Total of 14 computer labs within the College, including:
	Art Department Computer Lab
	Eddy 300
	Foreign Language Lab
	Journalism Desktop Publishing Lab I
	Journalism Desktop Publishing Lab II
	Music Technology lab
	Social Sciences/Statistics Computer Lab (student access to CLA/Nat Sci/and classes taught in lab)
Natural Resources	Biochemistry Undergraduate Resource Room
	CNR Advanced Technology Lab (ATL)
	CNR Computer Applications Lab (CAL)
	CNR Computer Learning Lab (CLL)
	Biology Computer Lab
	Computer Science General Computing Labs
	Ingersoll Computer Lab
	Mac Lab (Weber)
	Mathematics Computer Lab
VMBS	Social Sciences/Statistics Computer Lab (student access to CLA/Nat Sci/and classes taught in lab)
	Microbiology Undergraduate Computer Lab
	Vet Teaching Hospital Computer Lab – PVM program only
	W118 PVM coursework

1. Numbers denote number of computer labs.

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Following is a summary schedule of the per semester Charges for Technology in place during Academic Year 2001-2002:

CSU Charges for Technology – AY 02		
College Program	Undergraduate	Graduate
	Charge per Semester <sup>1,2</sup>	Charge per Semester <sup>1,2</sup>
Agricultural Sciences	\$75	\$75
Applied Human Science	63	63
Business	100	100
Engineering	147.50	147.50
Liberal Arts	53	53
Natural Resources	100	100
Natural Sciences	100	0
Veterinary Medicine & Biomedical Sciences	50	0
Intra-University Option	36	0

<sup>1</sup>Resident and non-resident students pay the same fees.

<sup>2</sup>Students enrolled for nine or more credits are considered full-time and required to pay the full amount according to their college affiliation. Part-time undergraduate and graduate students pay a pro-rated amount.

Attachment: Academic year 02 “College Reports on Impact of Charges for Technology & Their Administration”

**College Reports on Impact of Charges for Technology & Their Administration  
Spring 2002**

**1. Overview**

**1.1 Summary of CFT Account Activities Across All Colleges/Units**

<b>Table 1: Summary of Charges for Technology for FY 02</b>					
<b>College/Unit Per Semester CFT</b>	<b>Carry- forward from FY 01</b>	<b>FY 02</b>			<b>Carry- forward Request to FY 03<sup>3</sup></b>
		<b>Revenue</b>	<b>Need-Based Scholarships (% CFT<sup>1</sup>)</b>	<b>Expenses<sup>2</sup></b>	
<b>Agricultural Sciences</b> UG: \$75.00 Grad: \$75.00	\$22,431	\$212,272	\$20,902	\$234,817	(\$21,016)
<b>Applied Human Sciences<sup>4</sup></b> UG: \$63.00 Grad: \$63.00	10,230	457,609	39,790	413,885	14,164
<b>Business</b> UG: \$100.00 Grad: \$100.00	368,481	432,000	44,150	254,387	501,944
<b>Engineering</b> UG: \$147.50 Grad: \$147.50	64,168	491,649	50,000	501,541	4,276
<b>Liberal Arts</b> UG: \$53.00 Grad: \$53.00	20,210	451,931	45,200	426,941	0
<b>Natural Resources</b> UG: \$100.00 Grad: \$100.00	0	225,620	24,000	201,152	468
<b>Natural Sciences</b> UG: \$100.00 Grad: \$0.00	147,762	609,247	59,500	451,822	245,687
<b>Veterinary Medicine</b> UG: \$50.00 Grad: \$0.00	2006	49,446	4,850	45,827	775
<b>Intra-University Option</b> UG: \$36.00 Grad: N/A	0	212,017	20,211	191,806	0
<b>Total for All Units</b>	<b>\$635,288</b>	<b>\$3,141,791</b>	<b>\$308,603 (9.8 %)</b>	<b>\$2,722,178</b>	<b>\$746,303</b>
<sup>1</sup>	Need-based scholarships across all units equals 9.8% of Fall and Spring Semester CFT revenues				
<sup>2</sup>	Approximate – projection of estimated expenditures through June 30, 2002				
<sup>3</sup>	Carry-forward request detail provided in respective college/option report text; largely a budget sequencing phenomenon				
<sup>4</sup>	Applied Human Sciences is the only college that applies charges during the Summer Session				

## 1.2 Items for Discussion:

With regard to footnote 3 to Table 1, issues of budget sequencing with respect to Charges for Technology merit discussion: Charges for Technology budgeting follows the July 1-June 30 fiscal year accounting model. The majority of lab upgrades (construction/renovation/enhancement) and expenditures upon delivery of services are made during classroom down time in July and August (between Summer Session and Fall Semester). Carry-forward requests are largely a function of expenditure timing after the close of the fiscal year. Two colleges have carry-forward for special projects:

### **College of Business Laptop Computers**

With the approval of its Student Technical Advisory Council, the College of Business is investigating costs, circumstances and operational issues associated with offering an optional laptop computer lease program. The college is holding CFT funds in reserve to be used to initiate this laptop option. College CFT resources collected next year would be used to continue to support college computing laboratories and to augment the laptops leased to students in the college. A proposal is expected to come forward for consideration by the SBA at its June meeting.

### **College of Natural Sciences**

The carryover from FY 02 will be used to purchase computers and equipment for the new Chemistry and Biological Hall. Traditionally, capital construction funding does not equip the instructional and computer labs, so the departments started a savings account to equip the building, which will be finished sometime in summer of 2002. These purchases are expected to be made July/August 02, and will ensure that the new undergraduate labs are furnished with the latest scientific equipment.

## **2. College of Agricultural Sciences**

### **2.1 Administration of Charges for Technology**

Expenditures are determined by the Student Charges for Technology Committee using input from the Information Systems Coordinator (IS Coordinator). Meetings are held monthly. This committee is comprised of voting members: one graduate student from each of the departments and one undergraduate member from each major. Non-voting members (staff, faculty and other students) may also attend. Members must approve budget expenditures.

Expenditures are allocated to three areas:

**Undergraduate student labs** - There are four undergraduate computer labs that are updated and maintained with CFT funds.

**Department-specific technology** - Funds are allocated to departments for purchases of technology unique to that department. Undergraduate students perform a needs assessment and vote on specific purchases for their respective departments. The formula used to determine each department's allocation is:  $\$1,000 + (\text{the number of undergraduate students in the department.})$  If a department had 500 students, that department would be allocated \$1,500 for department specific technology purchases.

**Graduate student labs** - CFT funds are also used to support graduate student labs. Funds pay for a student employee to maintain all the graduate student labs. The graduate students approve all expenditures for the graduate student labs.

## **2.2 Computer Labs**

The College of Agricultural Sciences has four computer labs intended for the use of its students or students taking classes in the college:

Students monitor two labs (one with 35 computers and one with 20 computers), which provide the latest hardware, software, web access and peripherals such as several scanners, printers (B&W and color), and plotters.

A third lab is primarily a teaching lab, although it may be used as an overflow lab when the others are full, and contains 21 fully networked computers with a computer projection system.

The fourth lab is primarily an overflow/e-mail lab with 21 fully networked computers with a computer projection system. Its location provides a convenient site for students to come in to check e-mail and web-based assignments.

Agricultural Sciences also owns media equipment available for check-out by students for presentations, including laptops, digital projection systems, a portable white board reader and digital still and video cameras.

There are five graduate computer labs throughout the college. Each lab has four to eleven networked computers with scanning equipment and printers. A student is hired for 20 hours a week to monitor and maintain the labs under the supervision of the IS Coordinator.

The college launched an initiative last year to extend technology into classrooms without computers. CFT funds were used to purchase a mobile wireless laptop media center in a rolling cabinet, which was modified to travel easily on the rough sidewalks around campus. The media center includes 24 wireless laptop computers, a printer and a wireless access point which can be used to create an “instant” computer lab in any room. Students can work on computer projects under faculty supervision during class.

The college has also installed wireless technology in the landscape design studios to allow students network access via their own laptops.

## **2.3 Annual Revenue and Expenses (Tables 2a and 2b)**

The College of Agricultural Sciences will have a budget deficit this year. This is because major initiatives were implemented over the summer based on budgeting from past CFT revenues. However, college CFT revenues were down \$8,500. Additionally, there were unexpected expenses due to theft and due to escalating printing costs. The budget deficit will be corrected in FY 03. Security devices have been put in place to prevent future thefts and the university is reviewing printing policies for the campus at-large, so that printing costs can be controlled and managed.

<b>Table 2a: Summary of FY 02 CFT Budget – College of Agricultural Sciences</b>			
<b>Revenue &amp; Account Balance</b>			
<b>Item</b>		<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>			<b>\$212,272</b>
UG @ \$75/student/semester		\$178,372	
Grad @ \$75/student/semester		33,900	
Summer Session @ \$0		0	
<b>Carry-forward from FY 01</b>			<b>22,431</b>
<b>Total Revenues Available</b>			<b>\$234,703</b>
<b>Expenses (est.)</b>			<b>(255,719)</b>
Non-scholarship		\$234,817	
Scholarships		20,902	
<b>Carry-forward balance to FY 03 (est.)</b>			<b>(\$21,016)</b>

<b>Table 2b: Expense Summary – CFT FY 02 – College of Agricultural Sciences</b>			
<b>Item Detail</b>			<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>			<b>\$234,817</b>
<b>Servers: Hardware, Software</b>			0
<b>Hardware: Workstation/PCs</b>			89,443
Workstations/PCs		86,090	
Printers/plotters/scanners		3,353	
<b>Software</b>			\$14,182
<b>Supplies &amp; Misc. (paper, toner, UPS batteries)</b>			17,820
<b>Network Equipment (switches, hubs, wiring, etc.)</b>			424
<b>Maintenance</b>			0
<b>Personnel</b>			36,000
<b>Special Projects – Mobile Wireless Computer Lab</b>			60,652
<b>Non-computer Technology Equipment</b>			16,296
Presentation Equipment		\$ 3,793	
Video Security System		12,503	
<b>Scholarship Expenses – Subtotal</b>			<b>20,902</b>
<b>– Subtotal</b>			
<b>Total Expenses (est.)</b>			<b>\$255,719</b>

### **3. College of Applied Human Sciences**

#### **3.1 Administration of Charges for Technology**

Each semester the College of Applied Human Sciences (CAHS) IT Group reports to the CFT Committee, which is a subcommittee of the College Student Council. The IT Group reports on proposed changes in student computing, introduces special requests items and receives feedback on issues of concern to students. Major expenditure items beyond the normal maintenance and replacement are approved by the College CFT Committee. All voting members are students. There are no faculty members on the committee.

The CFT planning process is integrated with college planning through the College IT Group. The IT Coordinator for Student Computing works closely with faculty who use the college labs for teaching. The College IT Manager attends faculty meetings periodically in each of the academic departments as a way to integrate the instructional and informational

technology with the college planning. The information gathered both from the faculty users of the labs and the faculty meetings is communicated with the College CFT Committee. In this way, faculty provide input to the CFT planning process.

### 3.2 Computer Labs

The CAHS CFT support five computer labs with a total of 223 workstations. Table 3 is a chart of computer labs denoting hours and workstations available. During the past year, the labs have been expanded by approximately 45 workstations. Both the Moby Computer Lab and the Gifford Computer Lab were expanded and remodeled. With a significant investment of funds from the CAHS Dean's Office (other than CFT), both of the facilities now provide students with state-of-the-art facilities. HVAC, networking, and the general facilities were upgraded in both locations.

<b>Table 3 Applied Human Sciences Student Computing Labs</b>			
<b>Lab</b>	<b>Location</b>	<b>Number</b>	
		<b>Computers</b>	<b>Hours Open Week</b>
CTTEC Lab	105 Education Building	35	40
Education	220 Education Building	30	78
Gifford	317 Gifford Building	62	87
Industrial Sciences	200 Industrial Sciences Building	57	81
Moby	B212D Moby	39	74
<b>Total</b>		223	360

All five of the college computer labs are equipped with Windows 2000, Office 2000, Internet Explorer, AutoCad 2002, SPSS, and numerous other utilities. Labs are customized to meet the specific instructional needs of the departments nearby. CAHS Charges for Technology continue to fund industry-specific software providing students with valuable exposure to the latest technology. During the past year, additional industry standard design software and food service operations software were purchased. A new color fabric plotter was purchased jointly with CFT and college funds.

### 3.3 Annual Revenue and Expenses (Tables 4a and 4b)

The college is expecting a carry forward of \$14,164 at year-end. This balance is strictly a contingency balance to cover unexpected hardware/software or network problems. The balance from last fiscal year, \$10,230 was used for hardware purchases.

<b>Table 4a: Summary of FY 02 CFT Budget – College of Applied Human Sciences</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>		<b>\$457,609</b>
UG @ \$63/student per Semester and Summer Session	\$379,815	
Grad @ \$63/student per Semester and Summer Session	77,794	
<b>Carry-forward from FY 01</b>		<b>10,230</b>
<b>Total Revenues Available</b>		<b>\$467,839</b>
<b>Expenses (est.)</b>		<b>(453,675)</b>
	Non-scholarship	\$413,885
	Scholarships	39,790
<b>Carry-forward balance to FY 03 (est.)</b>		<b>\$14,164</b>

<b>Table 4b: Expense Summary – CFT FY 02 – College of Applied Human Sciences</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$413,885</b>
<b>Servers: Hardware, Software</b>	\$13,851	
<b>Hardware: Workstation/PCs</b>	128,445	
<b>Software</b>	34,005	
<b>Peripherals</b> (e.g., scanners, printers, plotters, LCDs, projectors)	20,625	
<b>Supplies &amp; Misc.</b> (e.g., paper, toner, furniture, ergonomics)	57,890	
<b>Network Equipment</b> (switches, hubs, wiring, etc.)	6,632	
<b>Maintenance</b> - Lectra software	35,437	
<b>Personnel</b>	117,000	
<b>Special Projects</b>	0	
<b>Non-computer Technology Equipment</b>	0	
<b>Scholarship Expenses – Subtotal</b>		<b>39,790</b>
<b>Total Expenses (est.)</b>		<b>\$453,675</b>

#### **4. College of Business**

##### **4.1 Administration of Charges for Technology**

The College of Business (COB) implements the Charges for Technology through a subcommittee of the Business College Council (BCC) called Student Technology Advisory Council (STAC). STAC is comprised of a student representative from each department in the College of Business, a student-at-large, who is not affiliated with the Business College Council, an honors society student, an ASCSU Senator, and the Lab Supervisor/STAC Advisor. These representatives are identified during Fall Semester BCC elections. All representatives, except the Lab Supervisor and the ASCSU Senator, vote and majority vote rules.

All requests for technology must be routed through STAC, with the exception of the lab manager, who has been given authority by STAC to spend up to \$1,000 for supplies.

Coordination of college planning is handled in several ways. A student member of STAC is invited to attend all Faculty Technology Advisory Committee (FTAC) meetings and STAC has direct access to the Dean and Associate Dean of the College of Business.

#### **4.2 Computer Labs**

General services provided to students include network drive space (60 MB) and an Outlook mail service that includes a public folder for each class offered by the COB. These folders allow for the distribution of class materials, class discussions, and assignments. Printing service is also provided for students. The College provides web and multimedia services and support for over 50 specialized business applications.

In addition to general services, CFT funds support the Rockwell Lab and two teaching classrooms. The Rockwell Lab services over 2,100 students with 85 computers in a Windows 2000 environment. The lab is open 100 hours per week: Monday through Thursday, 7:00 am-Midnight; Friday, 7:00 am-6:00 pm; Saturday, 9:00 am-6:00 pm; and Sunday, noon-Midnight. The lab is restricted to COB students and students taking classes in the COB.

The first of the two teaching classrooms is Rockwell 38. This lab is adjacent to the main lab and can be scheduled for class use on an as-needed basis. The room is used to integrate software and other technology into instruction. When not in use for class, this room also supports overflow from the main lab. The room has 33 computers and is open the same hours as the Rockwell Lab.

The second teaching classroom is the Allison Lab. This lab is used to teach the BD 150/111 “Software Productivity, Tool Efficiency” classes, and has a separate server and 30 computers all running Windows 2000.

Other technologies supported by the CFT funds in the COB include 30 laptops used for student check-out for group projects, as well as camcorders and scanners. Check-out is limited to use within the Rockwell building within a 3-hour time limit. The college supports laptop connectivity via a Lucent wireless network that services the courtyard, common areas, and the classrooms. All classrooms now have data ports and electrical power at the desktop.

#### **4.3 Annual Revenue and Expenses (Tables 5a and 5b)**

##### **Revenues**

Over the past six years, the undergraduate enrollment in the College has increased by 114%. This has provided an increase in the total amount of funding available for student technology, but unfortunately has exacerbated the serious space constraints within Rockwell Hall. Over these years STAC has accumulated \$501,944 in carryover, in the hope that space would become available to implement additional student computing labs and classrooms.

At this point there are no expected changes in the charges, unless the laptop initiative is approved. Those students participating in the laptop initiative would have their CFT reduced from \$100 per semester to \$80 per semester, but would have to pay an additional charge to lease the laptop.

##### **Expenditures**

For FY 02 the COB spent \$56,030 on new servers to meet the growing demand for network applications. This included a new Exchange mail server, operations server, and terminal services servers. COB also spent \$44,284 on server software for utility software such as Altiris Express for managing clients and Pharos for managing printers. The College has begun to transition more computing services and software toward centralized servers in order to facilitate maintenance and configuration, which has shifted software costs to the server side. The College is planning significant investments in Terminal Services to help alleviate some of the lab issues, and may be looking at making a substantial investment in both wireless and Ethernet networks. The latter projects are contingent on the approval of the laptop initiative that the college and university are considering.

<b>Table 5a: Summary of FY 02 CFT Budget – College of Business</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>		<b>\$432,000</b>
UG @ \$100/student per Semester	\$380,000	
Grad @ \$100/student per Semester	52,000	
<b>Carry-forward from FY 01</b>		<b>\$368,481</b>
<b>Total Revenues Available</b>		<b>\$800,481</b>
<b>Expenses (est.)</b>		<b>(298,537)</b>
Non-scholarship	\$254,387	
Scholarships	44,150	
<b>Carry-forward balance to FY 03 (est.)</b>		<b>\$501,944</b>

<b>Table 5b: Expense Summary – CFT FY 02 – College of Business</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$254,387</b>
<b>Servers: Hardware, Software</b>	\$100,314	
<b>Hardware: Workstation/PCs</b> Including planned add-ons (e.g., ZIPs, extra monitors, mice, network cards, etc.)	9,931	
<b>Software</b>	15,753	
<b>Peripherals</b> (e.g., scanners, printers, plotters, LCDs, projectors)	3,000	
<b>Supplies &amp; Misc.</b> (e.g., paper, toner, furniture, ergonomics)	14,869	
<b>Network Equipment</b> (e.g., switches, hubs, wiring, etc.)	15,020	
<b>Maintenance</b>	5,500	
<b>Personnel</b>	90,000	
<b>Special Projects</b>	0	
<b>Non-computer Technology Equipment</b> (e.g, wet labs, mixing chambers, etc.)	0	
<b>Scholarship Expenses – Subtotal</b>		<b>44,150</b>
<b>Total Expenses (est.)</b>		<b>\$298,537</b>

**5. College of Engineering**

**5.1 Administration of Charges for Technology**

In the College of Engineering, CFT are administered by the Engineering Student Technology Committee. This committee is comprised of four representatives from each department, two representatives from the engineering programs, the Associate Dean for Undergraduate Studies, and the Director of Engineering Network Services (ENS). The four departmental representatives are one faculty member, one graduate student, and two undergraduate students; the two program representatives are both undergraduate students. With a total of 20 members, the committee has a ratio of students to non-students of almost 3:1. The Engineering Student Technology Committee works with the College of Engineering Technology Committee to ensure adequate long-range planning and strategic pedagogical use of resources.

Initial appropriations for student laboratory expenses are made to ENS and the five engineering departments: Atmospheric Science, Chemical Engineering, Civil Engineering, Electrical & Computer Engineering, and Mechanical Engineering. The students voted to raise the annual charge for FY01-02 in order to create a pool of funds for strategic initiatives. Also, the funds normally allocated for proposals from the college at large were used to augment the pool of funds for strategic initiatives. In all cases, the Director of ENS is responsible for ensuring that all charges to the fund are valid charges per the Charges for Technology Manual.

**5.2 Computer Labs**

There are five college-wide computing facilities that are fully supported by the engineering CFT, four on-site and one in Allison Hall. Access to the four on-site labs is limited to students in the College of Engineering and is controlled by card reader systems. These labs are supported and maintained by students whose wages are paid for by the CFT. The five labs are:

**Table 6: Engineering Student Computing Labs**

Computing Lab	Location	Number		Availability
		Computers	Printers	
Allison Hall Lab	Allison E104	4	0	When building is open
Anderson Lab	Glover 220	100	3	24 hours
Electronic Classroom	Engineering A104	27	1	24 hours
LM Design Studio	Engineering B203	36	4	24 hours
General Lab	ERC A214	10	1	When building is open

In addition, there are approximately 10 departmental computing facilities, ranging in size from 4 to 18 computers that are partially supported and maintained by the CFT. The Charges for Technology also provide maintenance and supplies for non-computing instructional laboratories in the college. Equipment for loan, such as computer projectors and laptops, is also supported by the CFT.

**5.3 Annual Revenue and Expenditures (Tables 7a and 7b)**

Revenues of \$491,649 combined with the \$64,168 carry-forward for a total of \$555,817 in available funds. The entire \$64,168 carry-over had already been allocated to projects and was

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virtually expended by the end of Summer 2001. \$398,000 of the \$490,000 in revenue was disbursed for planned allocations. The remaining \$92,000 was reserved for strategic initiatives overseen by the committee itself. The Student Technology Committee anticipates a FY 03 carry-forward of less than \$4,500.

<b>Table 7a: Summary of FY 02 CFT Budget – College of Engineering</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>		<b>\$491,649</b>
UG @ \$147.50/student per Semester	\$370,749	
Grad @ \$147.50/student per Semester	120,900	
<b>Carry-forward from FY 01</b>		<b>64,168</b>
<b>Total Revenues Available</b>		<b>\$555,817</b>
<b>Expenses (est.)</b>		<b>(551,541)</b>
	Non-scholarship	\$501,541
	Scholarships	50,000
<b>Carry-forward balance to FY 03 (est.)</b>		<b>\$4,276</b>

<b>Table 7b: Expense Summary – CFT FY 02 – College of Engineering</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$501,541</b>
<b>Servers: Hardware, Software</b>		\$49,597
Servers	16,817	
Server backup system	20,008	
Server maintenance	3,469	
Citrix licenses	5,446	
Other software	3,858	
<b>Hardware: Workstation/PCs</b>		\$137,984
Computers/Terminals	100,970	
Monitors	24,682	
Computer Internals	3,551	
Memory (RAM)	804	
Hard disks	7,977	
<b>Software</b>		\$66,072
<b>Peripherals</b>		\$37,114
Printers	10,064	
Projection	23,859	
Other Peripherals	3,191	
<b>Supplies &amp; Misc.</b>		\$20,180
<b>Network Equipment</b>		\$1,454
<b>Maintenance</b>		\$5,084
<b>Personnel</b>		\$57,680
<b>Special Projects</b>		\$113,046
Security Systems	1,592	
Remote Access to Laboratory Resources	40,852	
Electronic Classrooms	62,678	
Senior Design Projects	7,924	
<b>Non-computer Technology Equipment</b>		\$13,329
<b>Scholarship Expenses – Subtotal</b>		<b>\$50,000</b>
<b>Total Expenses (est.)</b>		<b>\$551,541</b>

**6. College of Liberal Arts**

**6.1 Administration of Charges for Technology**

CFT are administered by the Charges for Technology Committee, which consists of four student representatives [the Vice President of the Liberal Arts College Council (LACC), one Social Science student approved by the LACC, one Arts & Humanities student approved by the LACC, and one College of Liberal Arts graduate student approved by the LACC], an Associate Dean or her/his representative, and two faculty/staff members appointed by the Dean. Requests for funding are presented to the committee. The Associate Dean reviews all requests and advises the committee of any implications related to College planning goals. The committee reviews and approves all expenditures made from CFT funds within the allocation categories determined by the Charges for Technology policy. Student members of the

committee retain the majority vote in all cases. Ten percent of the fees collected are used for need-based scholarships.

## 6.2 Computer Labs

Within the college, CFT support 14 computer labs containing over 300 computers. The labs are open on average for a total of 600 hours per week and serve over 500 students per day. An additional 223 hours per week of classes are taught in these labs. These labs directly support classes in composition, literature, creative writing, social sciences, technical journalism, technical theater, graphics design, and music theory, history and appreciation. In addition, some labs, especially Eddy 300, are open for use by any university student in any class.

## 6.3 Annual Revenue and Expenses (Tables 8a and 8b)

In addition to computing equipment, Charges for Technology support non-computer technology. The funds have been used to support the upgrade of the television production studio in Speech Communication. Theatre and dance students are able to utilize and learn from enhancements to the intelligent lighting system in the Music, Theatre & Dance department, while students in Journalism are able to use non-linear video editing systems and digital cameras purchased with CFT funds.

The college carried over approximately \$20,000 in CFT funds from FY 01 (Table 8a), which was unplanned and the result of a delay in filling purchase orders. Liberal Arts anticipates the expenditure of all CFT funds in FY 02.

<b>Table 8a: Summary of FY 02 CFT Budget – College of Liberal Arts</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	
<b>Revenue from CFT FY 02</b>		<b>\$451,931</b>
UG @ \$53/student per Semester	\$409,125	
Grad @ \$53/student per Semester	42,806	
<b>Carry-forward from FY 01</b>		<b>20,210</b>
<b>Total Revenues Available</b>		<b>\$472,141</b>
<b>Expenses (est.)</b>		<b>(472,141)</b>
Non-scholarship	\$426,941	
Scholarships	45,200	
<b>Carry-forward balance to FY 03 (est.)</b>		<b>0</b>

<b>Table 8b: Expense Summary – CFT FY 02 – College of Liberal Arts</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$426,941</b>
<b>Servers: Hardware, Software</b>	\$3,600	
<b>Hardware: Workstation/PCs</b>	206,100	
<b>Software</b>	16,695	
<b>Peripherals</b>	21,908	
<b>Supplies &amp; Misc.</b>	43,161	
<b>Network Equipment</b>	0	
<b>Maintenance</b>	22,500	
<b>Personnel</b>	80,200	
<b>Special Projects</b>	0	
<b>Non-computer Technology Equipment</b>	32,777	
<b>Scholarship Expenses – Subtotal</b>		<b>45,200</b>
<b>Total Expenses (est.)</b>		<b>\$472,141</b>

## **7. College of Natural Resources**

### **7.1 Administration of Charges for Technology**

Undergraduate and graduate students from the College of Natural Resources (CNR) College Council serve as representatives on the College Computer Committee, which initiates and oversees issues related to information technology in the CNR including CFT expenditures. Student representation consists of six students (five undergraduate, one graduate) who have final and veto authority on the expenditure of student-generated revenues. The College Council continues to be the contact point with the broader student body.

The computer lab managers make initial recommendations for CFT expenditures. The Computer Committee makes any necessary modifications necessary to ensure that the recommended purchases coincide with the overall direction of the CNR with respect to information technology.

### **7.2 Computer Labs**

The *Computer Learning Lab* (CLL) is a PC-based facility consisting of 60 Pentium IBM compatible computers. The software suite consists of a wide variety of applications including word processing, spreadsheet, graphics, GIS, CAD, database and statistical analysis software. The *Computer Applications Lab* (CAL) is a PC-based facility consisting of 26 Pentium IBM compatible computers. The CAL was specifically designed to help minimize the conflicts between the teaching demands of the faculty and student needs for open computing by designating it as a non-teaching facility, open to all students with CNR network access. The open hours for both the CLL and the CAL are:

- 7:00 am-Midnight, Monday through Thursday
- 7:00 am-7:00 pm, Friday
- Noon-6:00 pm, Saturday
- Noon-10:00 pm, Sunday

The *Advanced Technology Laboratory* (ATL) is a Unix-based facility consisting of 17 Sun Microsystems sparc workstations. The ATL is designed for GIS, remote sensing and

statistical applications that require more resources than are available in the PC environment. The open hours for the ATL are:

- 8:00 am-8:00 pm, Monday through Thursday
- 8:00 am-5:00 pm, Friday
- Noon-5:00 pm, Saturday and Sunday

The ATL has fewer open hours compared to the PC labs because: (1) the physical location of the ATL and PC labs (different buildings) necessitates staff being present in both facilities during any open hours; (2) 'console' use of the systems in the ATL tends to drop off in the mid-evening hours; and (3) students can gain remote access to the applications running on the Unix systems from internet-connected systems via ssh, telnet or X-emulation software such as Exceed.

Access to all computer laboratories is granted to all students within the CNR as well as students outside the CNR who are taking classes that require use of the College's computing equipment. CNR students are given 'permanent' accounts (until graduation) whereas non-CNR students are given temporary accounts that expire at the end of each semester.

### **7.3 Annual Revenue and Expenses (Tables 9a and 9b)**

**Expenditures:** Major purchase for the PC labs during FY 02 included: 14 replacement PC systems, an additional projection system, memory and hard drive upgrades for many systems due to the migration to the Windows 2000 operating system, a backup domain controller (server), additional disk storage (RAID technology), and network switches to increase network speed to the desktops in the 2<sup>nd</sup> floor NR labs. Software expenditures were almost entirely maintenance costs including upgrades for office suite software, statistics and math packages, and specialized software for spatial analysis (GIS and remote sensing applications such as Arc/Info and ERDAS Imagine).

Staffing costs for the labs (student hourly and work-study) totaled \$85,250.

**Carry-forward:** There was no carry-forward from FY 01 and none is anticipated going into FY 02.

<b>Table 9a: Summary of FY 02 CFT Budget – College of Natural Resources</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>		<b>\$225,620</b>
UG @ \$100/student per Semester	\$184,410	
Grad @ \$100/student per Semester	41,210	
<b>Carry-forward from FY 01</b>		<b>0</b>
<b>Total Revenues Available</b>		<b>\$225,620</b>
<b>Expenses (est.)</b>		<b>(225,152)</b>
Non-scholarship	\$201,152	
Scholarships	24,000	
<b>Carry-forward balance to FY 03 (est.)</b>		<b>468</b>

<b>Table 9b: Expense Summary – CFT FY 02 – College of Natural Resources</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$201,152</b>
<b>Servers: Hardware, Software</b>		\$13,212
<b>Hardware: Workstation/PCs</b>		31,725
	PC labs	\$29,325
	ATL	2,400
<b>Software</b>		15,205
	PC labs	\$10,565
	ATL	\$4,640
<b>Supplies &amp; Misc.</b>		37,060
	PC labs	\$37,060
	ATL	5,560
<b>Network Equipment (e.g., switches, hubs, wiring, etc.)</b>		2,800
<b>Maintenance</b>		15,900
	PC labs	\$6,800
	ATL	9,100
<b>Personnel</b>		85,250
	PC labs	\$59,500
	ATL	25,750
<b>Special Projects – PC labs (ergonomics)</b>		0
<b>Non-computer Technology Equipment</b>		0
<b>Scholarship Expenses – Subtotal</b>		<b>24,000</b>
<b>Total Expenses (est.)</b>		<b>\$225,152</b>

## **8. College of Natural Sciences**

### **8.1 Administration of Charges for Technology**

The College of Natural Sciences distributes Charges for Technology funds according to an algorithm based on the number of majors and the laboratory contact hours generated by each department.

Departments refer to the college Charges for Technology policy manual, which is updated annually, in developing proposals. Departments solicit input and ideas from students and faculty members and work with student clubs to generate proposals. Proposals are submitted to the CNS College Council for approval. Council members represent each department and student organization in the College. The Assistant Dean serves as faculty advisor to the Council. Council members debate each proposal and question departmental representatives as to proposed usage, availability to students, possible alternatives, etc. The Council has final word on approval of departmental proposals. The Assistant to the Dean monitors expenditures for compliance with university and college guidelines and adherence to approved items.

### **8.2 Computer Labs**

The College of Natural Sciences operates a large computer lab (MacLab) in the Weber Building. The lab has approximately 60 computers. There is also a CNS computer lab in Ingersoll Hall (21 computers), which is operated in cooperation with the Office of Residence Life. Both college labs are open to anyone; i.e. use is not restricted to college, or departmental students.

Several of the college's departments operate student computing labs, with access often limited to their majors or students enrolled in their classes. This includes two teaching computer classrooms that are used for Math and Statistics classes.

### **8.3 Annual Revenue and Expenses (Tables 10a and 10b)**

**Revenues.** The College of Natural Sciences collected approximately \$609,247 during Academic Year 02.

**Carry-forward to future FYs:** The carryover from FY 02 will be used to purchase computers and equipment for the new Chemistry and Biological Hall. These purchases are expected to be made July/August 03, and will ensure that the new undergraduate labs are furnished with the latest scientific equipment. Traditionally, capital construction funding does not equip the instructional and computer labs, so the departments started a savings account to equip the building, which will be finished sometime in the summer of 2002.

**Expenses:** Approximately 10% (\$59,500) of FY 02 CFT revenue was allocated to need-based scholarships. The remaining money was awarded in response to departmental proposals and was spent on computers and other computing equipment (\$205,971), software and licenses (\$22,497), supplies (\$15,480), maintenance (\$41,800), hourly workers (\$26,450), and laboratory and other non-computer technology (\$131,541).

The college was able to update teaching with the latest technological equipment, annual software licenses were renewed, and other department undergraduate computing resources were updated using these funds.

<b>Table 10a: Summary of FY 02 CFT Budget – College of Natural Sciences</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>		<b>\$609,247</b>
UG @ \$100/student per Semester	\$609,247	
<b>Carry-forward from FY 01</b>		<b>\$147,762</b>
<b>Total Revenues Available</b>		<b>\$757,009</b>
<b>Expenses (est.)</b>		<b>(511,322)</b>
Non-scholarship	\$451,822	
Scholarships	59,500	
<b>Carry-forward balance to FY 03 (est.)</b>		<b>\$245,687*</b>
* Funds to be carried over to FY 03 for remodeled Chemistry/Bioscience Hall		

<b>Table 10b: Expense Summary – CFT FY 02 – College of Natural Sciences</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$451,822</b>
<b>Servers: Hardware, Software</b>	\$6,522	
<b>Hardware: Workstation/PCs</b> (includes later add-ons such as ZIPs, extra monitors, mice, network cards, etc.)	205,971	
<b>Software</b>	22,497	
<b>Peripherals</b> (e.g., scanners, printers, plotters, LCDs, projectors)	9,580	
<b>Supplies &amp; Misc.</b> (e.g., paper, toner, furniture, ergonomics)	6,000	
<b>Network Equipment</b> (e.g., switches, hubs, wiring, etc.)	1,561	
<b>Maintenance</b>	41,800	
<b>Personnel</b>	26,450	
<b>Special Projects</b>	0	
<b>Non-computer Technology Equipment</b>	131,541	
<b>Scholarship Expenses – Subtotal</b>		<b>59,500</b>
<b>Total Expenses (est.)</b>		<b>\$511,322</b>

## **9. College of Veterinary & Biomedical Sciences**

### **9.1 Administration of Charges for Technology**

#### **Request and Approval of Expenditures**

- The CVMBS College Council sends a memo to all faculty members in the college once per semester, inviting them to submit proposals for the purchase of equipment for use in undergraduate teaching laboratory classes. Students may also make such proposals. Each faculty member or student who has submitted a proposal is asked to present his or her request at a College Council meeting, describing the type of equipment requested, the class(es) in which it will be used and the number of undergraduate students who will have access to the equipment.

- Students using the CVMBS computer lab are asked to complete surveys identifying equipment, upgrades, software, etc., that they would like to have in the computer lab. Computer lab personnel, such as the lab monitors, are also asked to submit proposals for computer equipment.
- Each proposal is then ranked by College Council, based on need, the number of CVMBS students who will use the equipment, and the total number of undergraduate students who will use the equipment. Members of the College Council then vote on each proposal and majority vote rules.

### **Student Participation in the Decision Process**

- Only students on the CVMBS College Council vote on proposals. No faculty members are allowed to vote. There are usually between 10 and 15 students on College Council each year. All student members may vote on the proposals if they have attended at least two meetings in the semester during which voting takes place.
- A faculty member serves on the College Council in a strictly advisory capacity. The faculty advisor assists students with questions regarding such matters as the amount of money available to be spent, the types of expenditures that are appropriate, and fiscal year deadlines. The advisor also acts as a liaison between the College Council, the faculty and the Dean's Office.

## **9.2 Computer Labs**

### **Undergraduate CFT-Supported Computer Lab**

One CVMBS computer lab is supported by student Charges for Technology and is housed in the Microbiology Department. There are currently 35 computers in the lab (34 PCs and one Mac). The lab is open 67.5 hours per week (7:30 am-9:00 pm, Monday through Thursday; 7:30 am-5:00 pm on Friday; and 1:00 pm-7:00 pm on Sundays). Access to the lab is limited to undergraduate students who are enrolled in the college with a declared major in environmental health, microbiology or pre-veterinary medicine. Lab monitors can determine a student's major either by looking at the student's activity card or by referring to a master list naming all of the students enrolled as majors in the college.

### **Non-CFT-Supported Computer Labs**

There are two additional computer labs in the college, but neither is funded by CFT. The lab in W118 Anatomy is for use by graduate and undergraduate students, but only for course-scheduled work. The lab at the Veterinary Teaching Hospital is open only to students enrolled in the professional veterinary program and is not an undergraduate computer lab.

### **Non-Computer Labs Supported by CFT**

Charges for Technology support a number of non-computer, undergraduate teaching lab classes in the Department of Environmental Health and the Department of Microbiology.

These classes are listed below:

<b>Environmental Health:</b>	EH230	Field Methods Lab
	EH320	Water Quality Lab
	EH350	Air & Industrial Hygiene Lab
	EH410	Waste Management Lab
<b>Microbiology:</b>	MB301/302	General Microbiology Lab
	MB343	Immunology Lab
	MB352	Medical Microbiology Lab
	MB425	Virology Cell Culture Lab
	MB432	Aquatic Microbiology
	MB436	Industrial Microbiology
	MB462	Parasitology and Vector Biology
	MB550	Microbial and Molecular Genetics Lab

**9.3 Annual Revenue and Expenses (Tables 11a and 11b)**

<b>Table 11a: Summary of FY 02 CFT Budget – VMBS</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>		<b>\$49,446</b>
UG @ \$50/student per Semester	\$49,446	
<b>Carry-forward from FY 01</b>		<b>2,006</b>
<b>Total Revenues Available</b>		<b>\$51,452</b>
<b>Expenses (est.)</b>		<b>(50,677)</b>
Non-scholarship	\$45,827	
Scholarships	4,850	
<b>Carry-forward balance to FY 03 (est.)</b>		<b>\$775</b>

<b>Table 11b: Expense Summary – CFT FY 02 – VMBS</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$45,827</b>
Servers: Hardware, Software	\$0	
Hardware: Workstation/PCs	6,506	
Software	0	
Peripherals – color printer	4992	
Supplies & Misc. – toner and ergonomic computer tables	729	
Network Equipment	0	
Maintenance	400	
Personnel	20,000	
Special Projects	0	
Non-computer Technology Equipment – Inverted microscopes for Microbiology Labs	13,200	
<b>Scholarship Expenses – Subtotal</b>		<b>4,850</b>
<b>Total Expenses (est.)</b>		<b>\$50,677</b>

## **10. Intra-University Option**

### **10.1 Administration of Charges for Technology**

**Requests for Expenditure Procedure:** The Intra-University Council Technology Committee (IUCTC) receives requests on an as-needed basis. Each request is submitted and explained by the individual/group who desires the funds, and after discussion the committee approves or denies the request. The decision is placed in the minutes of the meeting, and the purchases are made through the HELP/Success Center with the assistance of the IS Administrator and the Office Manager.

**Student Participation:** The IUCTC is comprised of approximately five students who either are, or have been, Intra-University majors and one faculty representative (the IS administrator). Each student has an equal vote, and any individual in the committee is able to propose expenditures or represent an outside member of the University who wishes to make a request for funds.

**College Planning:** The HELP/Success Center works with the IUCTC to write proposals, expend funds, and plan for the future. The ongoing contact for the IUCTC is the student information systems administrator; however, the director, assistant director, office manager and IU Council faculty representative work with the committee on various projects when needed.

### **10.2 Computer Labs**

The two Intra-University Computer Labs, located in Allison Hall and the Lory Student Center, are open from 8:00 a.m. to 10:00 p.m. Monday through Thursday, 8:00 a.m. to 6:00 p.m. Friday, and noon to 5:00 p.m. Saturday and Sunday, for a total of 76 hours per week. Access is currently available to all students; however, if IU students face a turn-away issue, restrictions may be placed on access by decision of the IUCTC. FY 02 IU Charges for Technology were used for supporting the computer labs, including the creation of the new Lory Student Center lab, and a purchase of five laptops for the Morgan Library.

### **10.3 Annual Revenue and Expenses (Tables 12a and 12b)**

**Revenue:** Revenues for FY 02 were \$212,017 of which \$20,211 were spent on scholarships. The remaining \$191,806 was used for hardware, software and personnel detailed in Table 12b.

**Hardware/Software:** A new server, 15 computers and 12 laptops were purchased for use in the labs and in the library. Software purchases include tools used for web design and specialized software to support assistive technology. New peripherals included a computer projector and laser printer. Other purchases included start-up supplies and ergonomic computer stations for the new lab in the Lory Student Center.

<b>Table 12a: Summary of FY 02 CFT Budget – Intra-University</b>		
<b>Revenue &amp; Account Balance</b>		
<b>Item</b>	<b>Subtotal</b>	<b>Total</b>
<b>Revenue from CFT FY 02</b>		<b>\$212,017</b>
UG @ \$36/student per Semester	\$212,017	
<b>Carry-forward from FY 01</b>		<b>0</b>
<b>Total Revenues Available</b>		<b>\$212,017</b>
<b>Expenses (est.)</b>		<b>(212,017)</b>
Non-scholarship	\$191,806	
Scholarships	20,211	
<b>Carry-forward balance to FY 03 (est.)</b>		<b>\$0</b>

<b>Table 12b: Expense Summary – CFT FY 02 – Intra-University</b>		
<b>Item Detail</b>		<b>Item Total</b>
<b>Non-Scholarship Expenses – Subtotal</b>		<b>\$191,806</b>
<b>Servers: Hardware, Software</b>	\$5,508	
<b>Hardware: Workstation/PCs</b> (includes later add-ons such as ZIPs, extra monitors, mice, network cards, etc.)	68,302	
<b>Software</b>	390	
<b>Peripherals</b> (scanners, printers, plotters, LCDs and projectors)	6,244	
<b>Supplies &amp; Misc.</b>	28,384	
<b>Network Equipment</b> – rewire for new computer tables	4,800	
<b>Maintenance</b>	0	
<b>Personnel</b>	78,178	
<b>Special Projects</b>	0	
<b>Non-computer Technology Equipment</b>	0	
<b>Scholarship Expenses – Subtotal</b>		<b>20,211</b>
<b>Total Expenses (est.)</b>		<b>\$212,017</b>