PROPOSAL TO ESTABLISH A NEW COURSE MATERIALS FEE

Dec 15 2009

School/College: College of Engineering
Department/Program: Electrical Engineering and Computer Sciences
Effective Date of Fee: Fall 2010
Department Contact: Kevin Mullally, 378 Cory Hall, 643-6141, kevinm@eecs.berkeley.edu

Course Title	Course No.	Required for Major (Y/N)	Annual H/C Enrollment (1)	Proposed Fee (2)
Please see **Table 3: Courses**	20 courses: CS150, CS160, CS162, CS164, CS169, CS184, CS186, CS188, CS3/L, CS61A, CS61B/L, CS61C/L, EE20N, EE105, EE120, EE122, EE128, EE140, EE141, EE142	Please see **Table 3**	4061	$16.00

(1) Annual headcount enrollment is defined as the average enrollment of the two most recent times the course has been offered, as reported on the campus' official third week enrollment figures.
(2) *Round to whole dollars*

1. Statement of Justification (*reasonableness test – why departmental instructional funding cannot cover the cost, how is the cost currently covered*)

A CMF of **$16 per semester** is proposed by EECS for 20 courses with scheduled instructional sessions or weekly assignments using our computers (**Table 3**). The total enrollment in these classes for Spring, Summer and Fall 2010 is estimated to be 4061 students, so this CMF would create an annual revenue of approximately $65,000.

We reluctantly request this from the students. It is needed to mitigate the 21% ($116,000) cut to state funding for instructional computing in July 2009, which followed a 5% cut the previous year. Without these CMF, we will be unable to fund essential and basic repairs, upkeep and licenses that are needed to maintain the status quo (**Table 2**). Even with this CMF, we still must reduce our expenses by $51,000.

Our group is expected to provide computing resources for special supplemental educational experiences in controlled labs and networked server environments. This exceeds the capability of student-owned computers. We do not use any of the central campus computing facilities that are available to students in other departments. These CMF will supplement the information technology materials and services that are shared by these specific courses.

Our funds support these costs:
- the purchase and maintenance of 415 workstations in 16 labs, 61 servers, 19 printers
- the network fees for all instructional computers and printers
- the infrastructure support (repair, maintenance, furnishings) of the computer labs and server rooms
- the licenses for several large specialized commercial software applications
- numerous software packages for installation on the students' home computers
- 24x7 cardkey access to workstations in the labs
- 24x7access to our login servers and to all the licensed software that runs on them, from any networked computer
- 5.75 career staff who do the systems administration, computer maintenance, applications programming and help desk support for over 100 classes using over 5000 networked computer accounts per semester .

Despite the cuts, the number of courses and students using our computing resources is expected to remain stable, and our instructors already need more support services than our staff can provide. As we strive to reduce costs, the conditions of our computers and labs are deteriorating. We need to replace damaged and worn out equipment and furnishings, for the benefit and comfort of the students.

PROPOSAL TO ESTABLISH A NEW COURSE MATERIALS FEE

Dec 15 2009

School/College:	College of Engineering
Department/Program:	Electrical Engineering and Computer Sciences
Effective Date of Fee:	Fall 2010
Department Contact:	Kevin Mullally, 378 Cory Hall, 643-6141, kevinm@eecs.berkeley.edu

Accountability: These CMF funds will have a zero balance at the end of the fiscal year. Any surplus would be resolved by a reduction in the subsequent fee.

2. Description of Department/School/College CMF review process (*please address student consultation in review process*)

Via email to each student in an EECS class, the students were invited to answer a survey about the proposed fee at http://inst.eecs.berkeley.edu/~inst/survey09/. The survey and its results are appended to this Proposal.

As a result of the survey, two classes (CS170 and EE249) were removed from this Proposal. Several students noted that they used our servers more than our workstations in some of the upper division lab classes, and that the wireless network was not always satisfactory. So I removed the network portion from the original Proposal and added the server depreciation portion, which reduced the overall CMF per student from $23 to $16.

3. Description of student appeal process for refund of CMS

Refunds would be handled on a per-case basis; student would make a written appeal to the course instructor.

4. What is the average cost of a textbook for this course? What is the average textbook cost for all departmental courses?

The cost of textbooks for EE and CS courses is $80-$150 per semester.

5. Detailed cost information and rate calculation.

Table 2 lists maintenance costs from the previous 2 years that are now unfunded. The CMF would be used to fund the predictable recurring items on this list (such as software licenses) and items that are similar to the one-time items (such as replacing broken chairs in a lab).

Chair's signature _____ Date _____

Dean's signature _____ Date _____

Dec 15 2009

School/College:	College of Engineering
Department/Program:	Electrical Engineering and Computer Sciences
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Attachments

Table 1 Cost Table (from "CMF-ISG-2009.xls")
Table 2 Unfunded Operating Costs (itemized) (from "CMF-ISG-2009.xls")
Table 3 Courses that Use the Computer Labs (enrollments) (from "CMF-ISG-2009.xls")
Table 4 Server Depreciation Costs (from "CMF-ISG-2009.xls")
Student Survey Presentation (from "http://inst.eecs.berkeley.edu/~inst/survey09/")
Student Survey Results (from "survey2009-results.doc")

COST TABLE
TO ESTABLISH A NEW COURSE MATERIALS FEE

Department EECS
Course No. 20 EE and CS courses (see **Table 3: "Courses that Use the Computer Labs"**)
Annual H/C Enrollment [1] 4061.00

SPECIFIC COST CATEGORIES					
A. Supplies & Expense **Include only the amounts to be charged to CMF.*					**Annual cost[2] to CMF funds**
	1)	Infastructure Maintenance			**$7,041**
	2)	Printer Maintenance			**$800**
	3)	Software Maintenance			**$13,188**
	4)	Computer Maintenance			**$21,148**
		Please see **Table 2: "Unfunded Operating Costs"** for itemized lists			
B. Equipment *annual cost = purchase cost divided by years of useful life*			**equip item purchase cost**	**years of useful life**	**Annual cost[2] to CMF funds**
	5)	Server Depreciation	$113,080	5	**$22,616**
		Please see **Table 4: "Servers"** for itemized lists			
				TOTAL:	**$64,793**

PROPOSED FEE : **$16**

(fee is based on annual cost funded by CMF divided by annual headcount enrollment)

C. Course Costs Charged to Other Dept Funds					**Annual Cost to Non-CMF funds**
	1)	Infastructure Maintenance			**$8,822**
	2)	Printer Maintenance			**$14,610**
	3)	Software Maintenance			**$1,089**
	4)	Computer Maintenance			**$29,348**
	5)	Server Depreciation			**$33,924**
				TOTAL:	**$87,793**

(1) Annual headcount enrollment is defined as the average enrollment of the two most recent times the course has been offered, as reported on the campus' official third week enrollment figures.

(2) Annual cost is defined as the actual expense during the most recent complete academic year.

Table 2. Unfunded Costs

EECS ISG Budget FY 2009-2010

Examples of Unfunded operating costs

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Category	Description	Vendor	FY 2007-2008:	FY 2008-2009:	FY 2009-2010: projected (average of last 2 years)
INFRASTRUCTURE	telephones in labs (for safety)	UCB Telecom	$1,296	$2,759	$2,027
INFRASTRUCTURE	projector mount in computing lab (at request of instructor)	Lynon Locks	$0	$434	$217
INFRASTRUCTURE	CardKey System Fees + repairs for labs	UC Police	$2,619	$924	$1,772
INFRASTRUCTURE	additional security bars for windows in lab	EECS Machine Shop	$0	$651	$325
INFRASTRUCTURE	~~wax floors, wash windows; repair door locks in labs~~	~~UCB Physical Plant~~			
INFRASTRUCTURE	replace 30 broken chairs per year	OneWorkPLace	$5,400	$0	$2,700
	SUBTOTAL:		**$9,315**	**$4,767**	**$7,041**
PRINTER	replacement parts to repair 19 printers	ComputerCare; various others	$238	$1,362	$800
	SUBTOTAL:		**$238**	**$1,362**	**$800**
SOFTWARE	2 year Hspice/TCAD Licenses	Synopsys Inc.	$0	$3,000	$1,500
SOFTWARE	software License renewal: MATLAB	Math Works Inc.	$1,987	$2,017	$2,002
SOFTWARE	software License Renewal: CADENCE	Cadence Design Systems	$4,500	$4,894	$4,697
SOFTWARE	EMC tape archiving software licenses:: LEGATO Networker	The Scholars' Workstation	$0	$3,112	$1,556
SOFTWARE	24 software licenses/ 1 media: MACOSX	The Scholars' Workstation	$1,034	$0	$517
SOFTWARE	SSL Certificate	EECS IDSG	$750	$750	$750
SOFTWARE	Photoshop; Quicktime; Cheetah Burner; Kagi; VMWare; Symantec for lab PCs	various	$3,693	$638	$2,166
	SUBTOTAL:		**$11,964**	**$14,411**	**$13,188**
SERVERS	5-year depreciation for replacement of shared Instructional servers **(see table 4. Servers)**	SUN, Dell, various	$22,616	$22,616	$22,616
	SUBTOTAL:		**$22,616**	**$22,616**	**$22,616**
COMPUTERS	for user file backups: AIT3 tapes & cleaning cartridges	Coastal Micro Supply	$1,054	$2,026	$1,540
COMPUTERS	for lab computers: new kbds & mice	various	$3,600	$659	$2,130
COMPUTERS	for lab computers: desktop RAM	various	$312	$143	$228
COMPUTERS	for lab computers: DVD burners; hard drives	various	$1,246	$1,600	$1,423
COMPUTERS	for lab computers: video adapters, batteries, video cards, fans	various	$1,741	$2,631	$2,186
COMPUTERS	Data access service for student enrollment records	UCB Telecom	$1,804	$1,804	$1,804
COMPUTERS	SUN servers: 6 hardware contracts	SUN	$9,400	$6,643	$8,022
COMPUTERS	NetApp file server: replacement disks & parts	Berkeley Communications Corp	$1,951	$1,740	$1,845
COMPUTERS	3 new projectors for labs	Dell Computers Corp	$0	$2,621	$1,311
COMPUTERS	3 flatbed scanners for labs	Amazon.com	$597	$0	$299
COMPUTERS	playstation with Linux for programming on an MIPS cpu	e-Bay	$587	$136	$362
	SUBTOTAL:		**$22,292**	**$20,004**	**$21,148**
	TOTAL:		**$66,426**	**$63,160**	**$64,793**

Table 3: Courses that Use the Computer Labs (enrollments and projections)

	Course Title	Software Used	Course Number	Required for major? (y/n)	Sp 2008	Sp 2009	Sp 2010 projected (average of last 2 years)	Su 2008	Su 2009	Su 2010 projected (average of last 2 years)	Fa 2008	Fa 2009	Fa 2010 projected (average of last 2 years)	2010 total projected (Sp+Su+Fa)
1	Components and Design Techniques for Digital Systems	XILINX	CS150	5	39	65	52	0	0	0	71	44	58	109.50
2	User Interface Design	FLEX, SAM, IMOVIE, SDKs	CS160	5	67	58	63	0	0	0	43	52	48	110.00
3	Operating Systems & System Programming	SVN, NACHOS	CS162	5	104	41	73	0	0	0	116	125	121	193.00
4	Programming Languages and Compilers	SVN, JAVAC, PYTHON, etc	CS164	5	39	63	51	0	0	0	0	64	32	83.00
5	Software Engineering	SVN, JAVAC, PYTHON, etc	CS169	5	52	56	54	0	0	0	29	32	31	84.50
6	Computer Graphics	OPENGL, GLUT	CS184	5	51	51	51	0	0	0	57	68	63	113.50
7	Database Systems	POSTGRES	CS186	5	77	106	92	0	0	0	107	108	108	199.00
8	Artificial Intelligence	PYTHON, ECLIPSE	CS188	5	75	95	85	0	0	0	211	218	215	299.50
9	Symbolic Programming	SCHEME	CS3/L	n	102	103	103	29	29	29	168	178	173	304.50
10	Structure ... of Computer Programs	SCHEME	CS61A	y	205	273	239	75	91	83	373	387	380	702.00
11	Data Structures	JAVA	CS61B/L	y	164	275	220	79	111	95	99	121	110	424.50
12	Machine Structures	JAVA, C	CS61C/L	y	200	168	184	100	116	108	150	174	162	454.00
13	Structure ... of Systems and Signals	LABVIEW	EE20N	y	106	131	119	0	0	0	177	232	205	324.00
14	Microelectronic Devices and Circuits	HSPICE	EE105	n	69	55	62	0	0	0	67	69	68	130.00
15	Signals and Systems	MATLAB	EE120	n	107	92	100	0	0	0	79	72	76	175.00
16	Communication Networks	OPNET, NS-2	EE122	n	40	46	43	0	0	0	94	94	94	137.00
17	Feedback Control	MATLAB, QUANSER	EE128	n	0	0	0	0	0	0	26	30	28	28.00
18	Linear Integrated Circuits	HSPICE	EE140	n	36	42	39	0	0	0	31	17	24	63.00
19	Digital Integrated Circuits	HSPICE, CACENCE	EE141	n	57	26	42	0	0	0	67	47	57	98.50
20	Integrated Circuits for Communication	HSPICE, ADS	EE142	n	0	0	0	0	0	0	34	25	30	29.50
			Totals		**1590**	**1746**	**1669**	**283**	**347**	**315**	**1999**	**2157**	**2079**	**4061.00**
	enrollment in all EECS classes		**Totals**		4411	4816	4614	563	624	594	4831	5233	5032	10239.00

In Fall 2009 (for example), about 473 students are in 2 of these classes concurrently and would pay this CMF for 2 classes

In Fall 2009 (for example), about 59 students are in 3 of these classes concurrently and would pay this CMF for 3 classes

Table 4: Server Depreciation

Servers	Description	units	Average Unit cost	Lifespan (years)	Total Cost to Replace	Annual cost of depreciation
Star, Nova, C199, Solar, Quasar, Pulsar, Cory	SUN models T5220, V440, E440, E450 (Solaris): multi-user, multi-processor login servers for programming and CAD applications	7	$18,000	5	$126,000	$25,200
Icluster	DELL 1950s (Linux): cluster for parallel programming	26	$2,200	5	$57,200	$11,440
Ilinux1, Ilinx2, Ilinux3	DELL 2650s (Linux): login servers for programming and CAD applications	3	$2,500	5	$7,500	$1,500
Po, Torus, Rombus, Pentgon, Sphere, Cube, Box	DELL 1650 & 1550s (Solaris): login servers for programming, autograding and databases	7	$2,500	5	$17,500	$3,500
Iserver1, Isever2, Iserver3, Kramnik	DELL 1750 (Windows): login servers for programming and CAD applications	4	$4,500	5	$18,000	$3,600
Archive, Inst, Imail, Ilpdap1, Ildap2, Mamba	DELL 1650 (Solaris): backend servers for tapes, student email, course WEB pages, UNIX home directories, passwords	6	$2,500	5	$15,000	$3,000
Fileservice	SunFire V20Z & disk array (Windows): Windows home directories	1	1500	5	$1,500	$300
Netshow01, California, Iesg, Salov, Scotland	DELL 6650 & 1650 (Windows): course WEB sites and video streaming	5	$8,000	5	$40,000	$8,000
					$282,700	**$56,540**
cost to classes in this Proposal (the percentage of all our students)				40%	**$113,080**	**$22,616.00**
remaining cost, to Instructional 19900 funds				60%	**$169,620**	**$33,924.00**

EECS Instructional and Electronics Support
Department of Electrical Engineering and Computer Sciences

Student Survey about EECS Course Fees

October 19, 2009

Hello EECS student,

I hope you can spare a minute to give us your opinion about new Course Materials Fees (CMF) for Fall 2010 that we will propose. There is a link to an **anonymous survey** at the bottom of this page.

The Proposal:

We propose that a CMF of **$23 per semester** be charged to students in 22 EE and CS courses that have scheduled instructional sessions or weekly assignments using our computers. The list of classes is in the **anonymous survey** (below) and in the text of our CMF Proposal (Table 3). CMF are charged to students who are enrolled on the 8th week of the semester.

Course fee proposals are reviewed by a campus committee who may approve, alter or reject them. Student feedback to the proposal is required and is highly regarded.

The Need:

We know that any fee imposes a burden on each of you. We reluctantly request fees now because our funding from the University was reduced by 21% ($116K) in July 2009, following the reduction to the UC system by the State Legislature. This cuts into essential operating expenses for which we have no alternative funding, including computer and printer repair, shared software licenses and the physical cleanliness and safety of our labs. These items are detailed in the "Unfunded Operating Costs" (Table 2) in the Proposal.

Despite the alarming increase in tuitions, we are told that this cut is permanent and may be followed by further cuts in FY 2010-2011.

EECS does receive funding from the University to support the Instructional computer labs. Supplemented by generous discounts and grants from computer and software providers, we have been able to maintain and improve a heterogeneous computing environment that has grown from about 110 workstations and 10 servers in 1990 to 415 workstations and 61 servers today. Our computers and software are accessible 24x7 in many of our labs as well as from home computers and wireless laptops.

However, in the last 2 years our funding from the State has diminished severely. Our funds were cut by 5% in FY 2008-2009. We absorbed that loss without the need for course fees by deferring maintenance in our labs and by having some staff take voluntary leave without pay.

But the additional 21% cut in FY 2009-2010 (along with the 8% involuntary staff reductions due to furloughs) is too severe to absorb without help. We hope to regain about $85K annually via this course fee.

Please let us know your opinion about this proposed fee by completing this **short, anonymous survey**:

Go to the Survey

For more information about EECS Instructional resources:

Staff and Services	-	Summary of our responsibilities
Fall 2009 Manager's Report	-	Current Instructional facilities, recent improvements

Thank you,

Kevin Mullally, Manager of EECS Instructional Support
378 Cory Hall, (510) 643-6141, kevinm@eecs.berkeley.edu

EECS Instructional and Electronics Support
Department of Electrical Engineering and Computer Sciences

Student Survey about EECS Course Fees

CMF Survey Questions - October 2009

1. **Please check the courses that you have taken or plan to take:**

☐ cs150	☐ cs170	☐ cs3l	☐ cs61cl	☐ ee128
☐ cs160	☐ cs184	☐ cs61a	☐ ee20n	☐ ee140
☐ cs162	☐ cs186	☐ cs61b	☐ ee105	☐ ee141
☐ cs164	☐ cs188	☐ cs61bl	☐ ee120	☐ ee142
☐ cs169	☐ cs3	☐ cs61c	☐ ee122	☐ ee249

2. **For the courses that you selected, do you think a $23 course fee is acceptable for:**
   - ○ each of those courses
   - ○ none of those courses
   - ○ some of those courses (you could list them in the comment below)

3. **The $23 fee is for costs in 5 categories. Please give your opinion about the status of each category:**

Infrastructure	In EECS labs, the condition of chairs, cleanliness (including keyboards and mice), garbage bins, temperature, lighting, whiteboards, etc is usually: ○ bad ○ acceptable ○ excellent Cost last year: $10,984	Would you pay **$2** per semester to sustain and improve this service? ○ no ○ yes
Printers	In EECS labs, the reliability of the printers is usually: ○ bad ○ acceptable ○ excellent Cost last year: $15,860	Would you pay **16¢** per semester to sustain and improve this service? ○ no ○ yes
Software	Is it usually convenient for you to run software for your assignments? Is it available in labs and over the net from your laptop? Does it work according to the instructions you received in class? ○ no, unsatisfactory ○ OK, could be better ○ yes, great Cost last year: $17,567	Would you pay **$2.84** per semester to sustain and improve this service? ○ no ○ yes
Computers	Do the Instructional computers (workstations and servers) usually work well for you?	Would you pay **$5** per semester to sustain and improve this service?

	○ no, unsatisfactory ○ OK, could be better ○ yes, great Cost last year: $28,060	○ no ○ yes
Network	In EECS labs, the reliability of the wired and wireless network is usually: ○ bad ○ acceptable ○ excellent Cost last year: $60,000	Would you pay **$13** per semester to sustain and improve this service? ○ no ○ yes

4. Comments or Questions (please include your email address to get an answer):

Submit Survey back to CMF Survey Intro Clear Form

Thank you.

Contact: Kevin Mullally (510/643-6141)

University of California at Berkeley
Dept of Electrical Engineering and Computer Sciences
Instructional Support Group

Student Survey about EECS Course Fees

October 2009

In October 2009, the EECS Instructional Support Group posted an on-line survey that asked students for feedback about our proposal for course fees starting in Fall 2010. The proposal was to charge $23 to students in 22 EE and CS courses to help offset our severe budget cut of $116K (21%). The answers were very helpful. Despite the frustration of rising costs and declining services, most students really considered the problem and gave well-considered responses. I am grateful to them.

Summary:

12% said that no portion of the fee was justified for any classes
68% said that some portion of the fee was justified for some classes
20% of the students accepted the proposed fees completely

The majority of students did not want the fees, which is understandable. Some were vehemently opposed, while others acknowledged the budget shortfall and expressed resignation or even support for fees**.** It was clear that the course fee was not justified for CS170 or EE249. There were numerous reasonable suggestions for alternatives and improvements. One theme was that some students prefer to use their personal laptops to connect to our servers. Another theme was that the AirBears wireless network was inconsistent despite the high cost of our networking.

As a result of this survey, this is how I have changed the Proposal:

- reduced the fee to **$16** per semester (per course)
- removed CS170 and EE249 from the proposal
- removed the controversial network portion ($13 of the original $23 fee)
- inserted a server depreciation portion ($6 of the new $16 fee)

In addition, we intend to implement these changes to allocate our resources better for the students:

- install power strips and wired network connectivity for laptop users in 199 Cory, 277 Soda and elsewhere
- enable authenticated access to floating software licenses for laptop users when permissible
- seek support of the EECS e-Academy site from a student group
- install power-saving features on the workstations and lighting in our labs
- build a cluster of donated computers for running virtual servers for courses
- retire Instructional email service before Fall 2010
- reduce the number of workstations in our labs before Fall 2010

An analysis of the responses is below:

Kevin Mullally
Manager, EECS Instructional Support Group
378 Cory Hall, UC Berkeley
http://inst.eecs.berkeley.edu/~kevinm

University of California at Berkeley
Dept of Electrical Engineering and Computer Sciences
Instructional Support Group

Student Survey about EECS Course Fees

October 2009

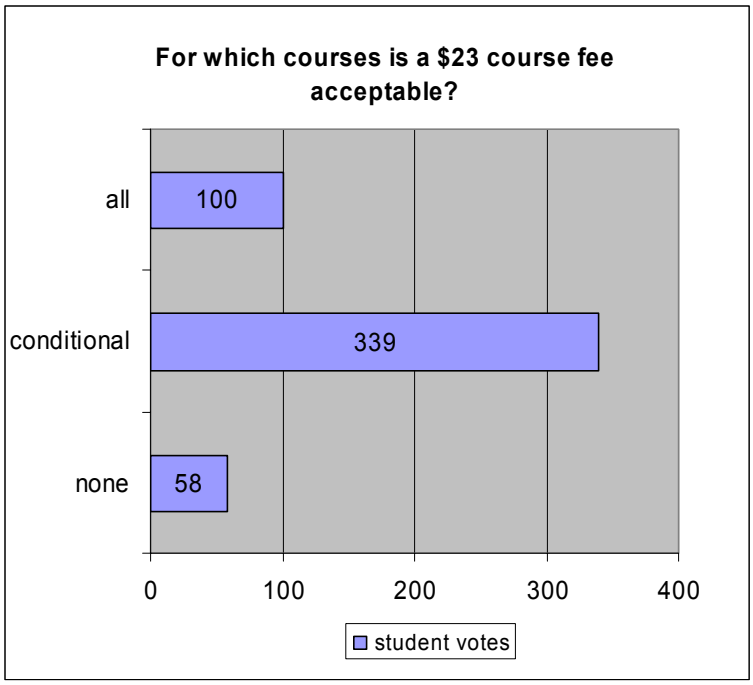
I. Statistics: The survey population

On October 19, email was sent to 2889 students, which is every student who was currently enrolled in an EECS class. They were invited to complete an anonymous survey about a proposal for new course fees. A total of 497 responses (17%) were submitted in a week.

20% of the students (100) accepted our justification for the fees, although they often asked that we seek alternatives or implement improvements at the same time.

68% of the students (339) gave qualified responses in which they added comments to explain which courses. When they named specific courses that should be included or excluded from the proposed fees, those courses were added to the per-course tally in section **IV** below.

12% (58) voted unconditionally for no new fees.



University of California at Berkeley
Dept of Electrical Engineering and Computer Sciences
Instructional Support Group

Student Survey about EECS Course Fees

October 2009

II. Statistics: Rating the condition of the computing environment

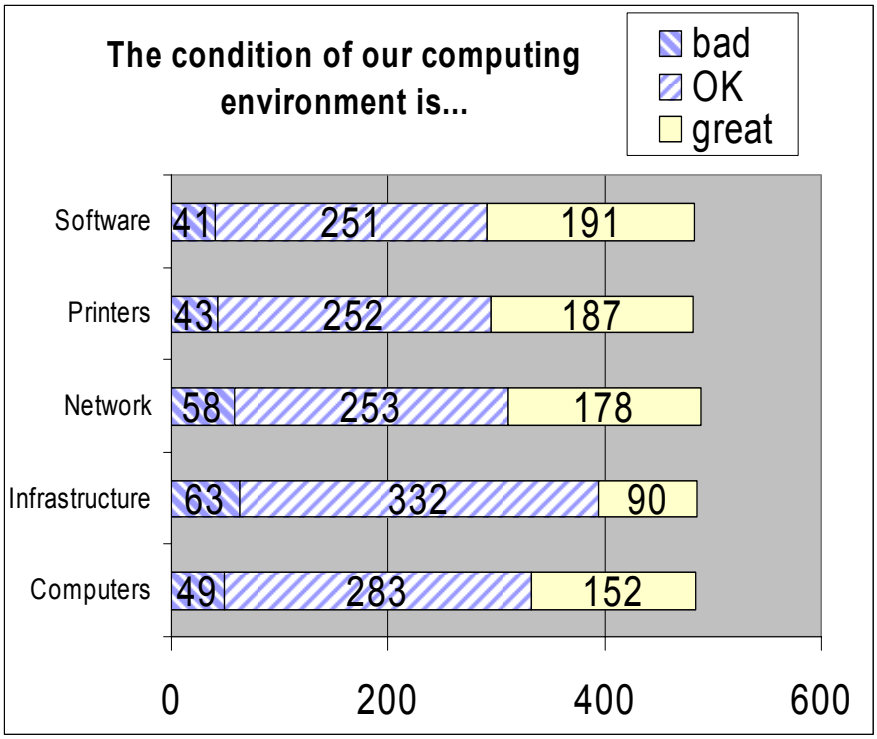
Software: "Is it usually convenient for you to run software for your assignments? …"

Printers: "In EECS labs, the reliability of the printers is usually…"

Network: "In EECS labs, the reliability of the wired and wireless network is usually..."

Infrastructure: "In EECS labs, the condition of chairs, cleanliness (including keyboards and mice), garbage bins, temperature, lighting, whiteboards, etc is usually…"

Computers: "Do the Instructional computers (workstations and servers) usually work well for you? **…"**



Students gave more favorable or acceptable ratings to these conditions that I expected. I wish we could replace worn out and filthy chairs, keyboards, mice, etc and clean the labs more often.

The most common complaint about the network was that the wireless AirBears service is unreliable. We do want to improve the network and server access for those users and decrease the number of workstations in our labs.

Several students commented that they use their own laptops and home computers extensively for EECS coursework. I reaction to that, I have **removed the network portion ($13)** from the proposed fee.

The survey should have stated more explicitly that the fee is to support Instructional computing, not just the labs. I have **added a server depreciation portion ($6)** to the revised version of the course fee proposal.

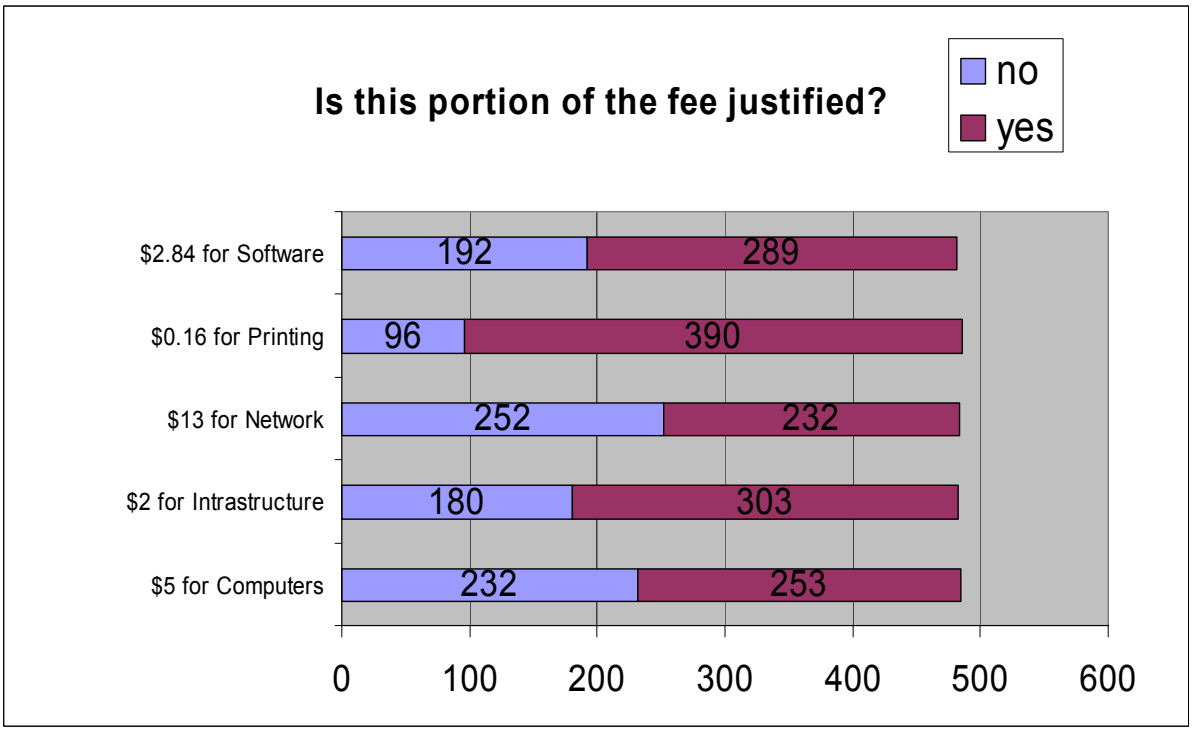
The net result is **a lower fee** ($16 instead of $23). This is also intended to lessen the impact on students who are charged the fee for more than one course at a time.

University of California at Berkeley
Dept of Electrical Engineering and Computer Sciences
Instructional Support Group

Student Survey about EECS Course Fees

October 2009

III. Statistics: Are fees justified for specific services



While **40% of the students did not approve of the proposed fees for the courses they are taking**, 74% of them responded "yes" to at least one of the above portions of the fee.

This chart presents a more nuanced view: **60% of the responses in this data are "yes"**. That suggests an agreement that some fee is justified, although not necessarily for all the services that are listed.

The survey did not offer the students alternative ways to compute the proposed fees, but that might have invited more positive responses to the idea of fees.

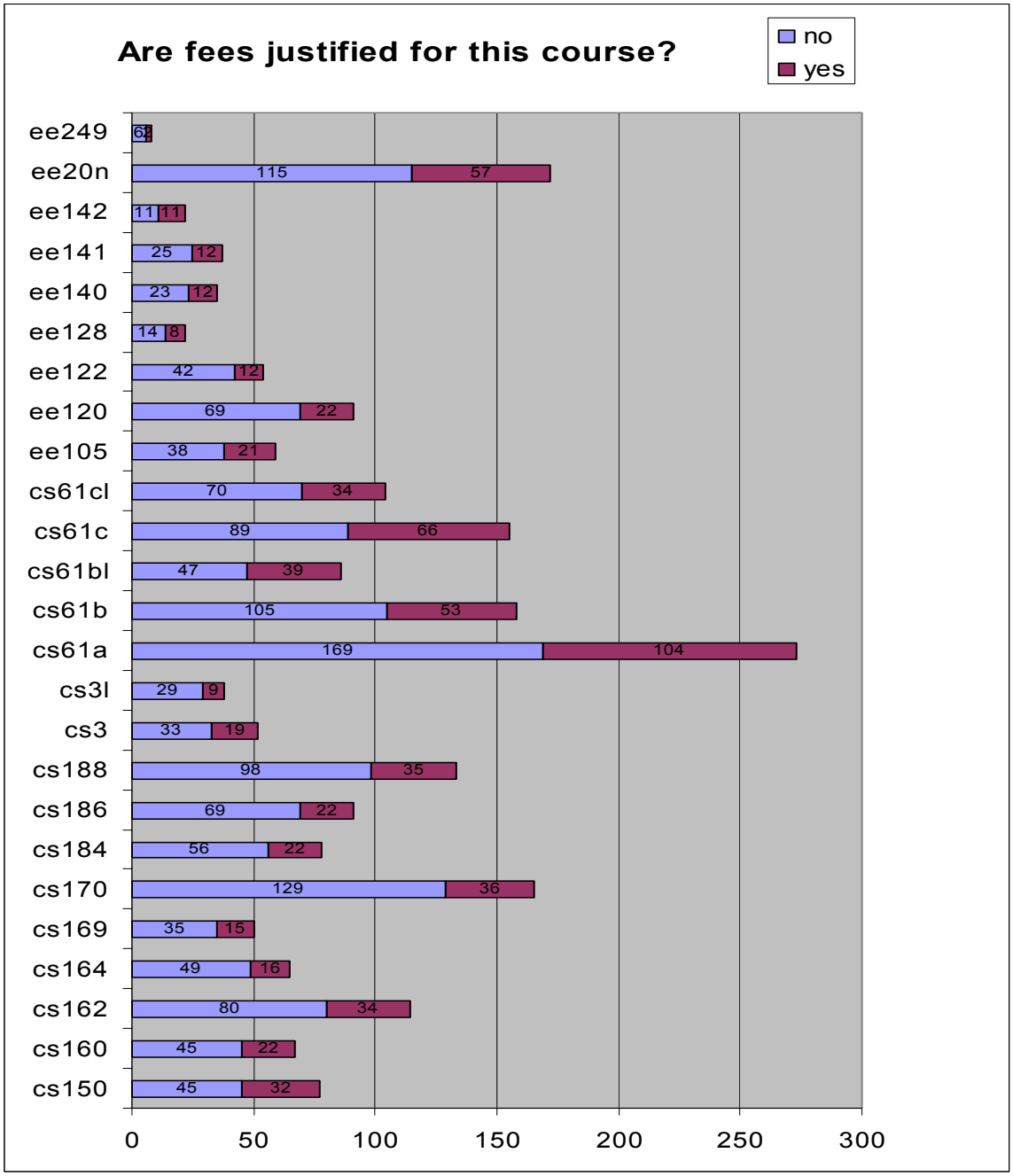
University of California at Berkeley
Dept of Electrical Engineering and Computer Sciences
Instructional Support Group

Student Survey about EECS Course Fees

October 2009

IV. Statistics: Are fees justified for specific courses

No course received a majority of votes for a fee, but these numbers and the related comments make it clear that CS170 and EE249 should be removed from the list.



Student Survey about EECS Course Fees

October 2009

II. Comments and replies

Students' comments and the ISG Manager's replies are posted at https://inst.eecs.berkeley.edu/~inst/survey09/