

Instructional Support Group (ISG)

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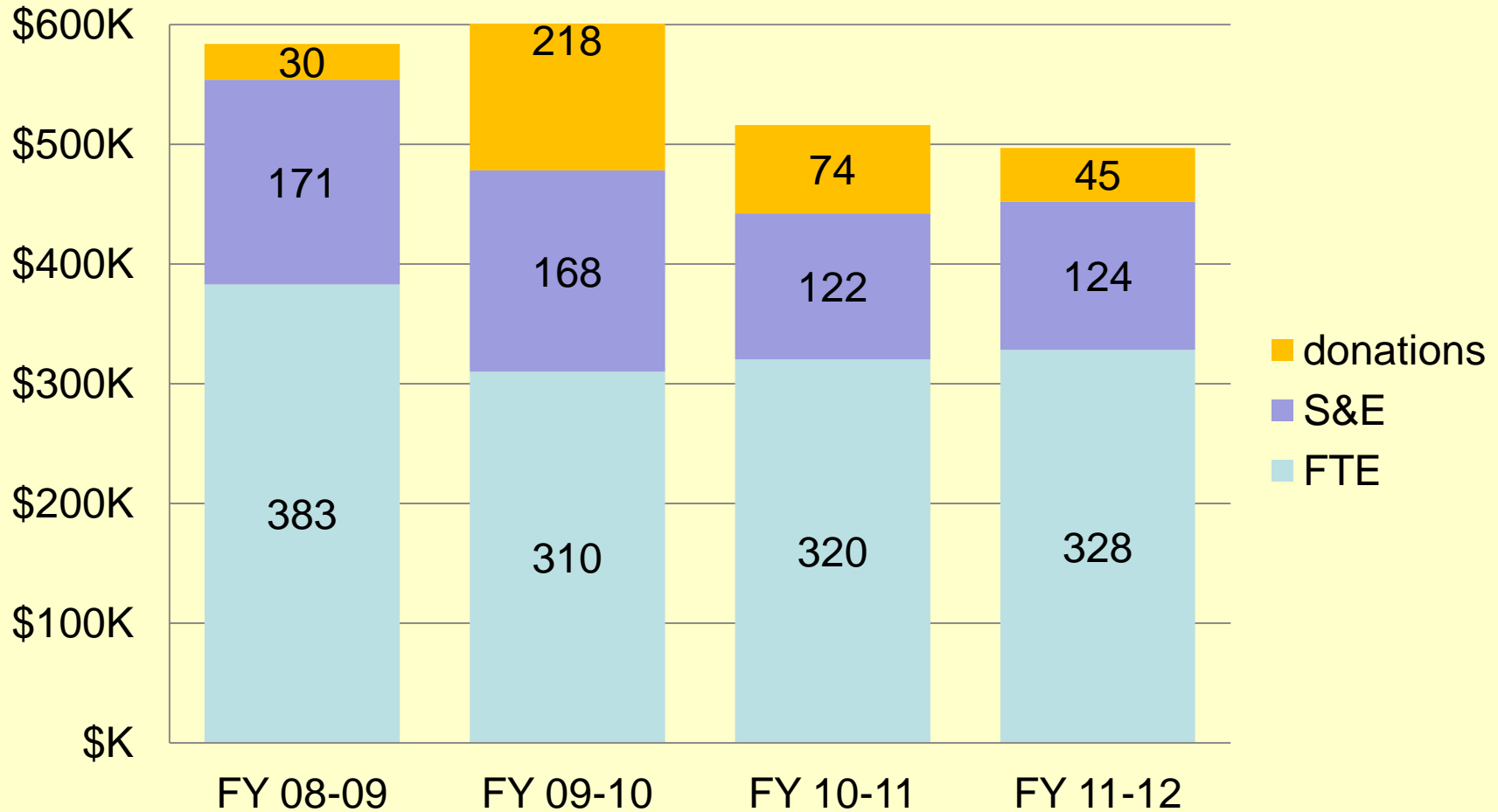
Agenda for CNIL – Feb 14, 2012

I. Status Report

- Salaries vs equipment replacement: competing for same S&E funds
- Increasing reliance on donations; inconsistent equipment replacement cycle
- How to be “agile” but also plan ahead? (ie course fees: a year in advance)

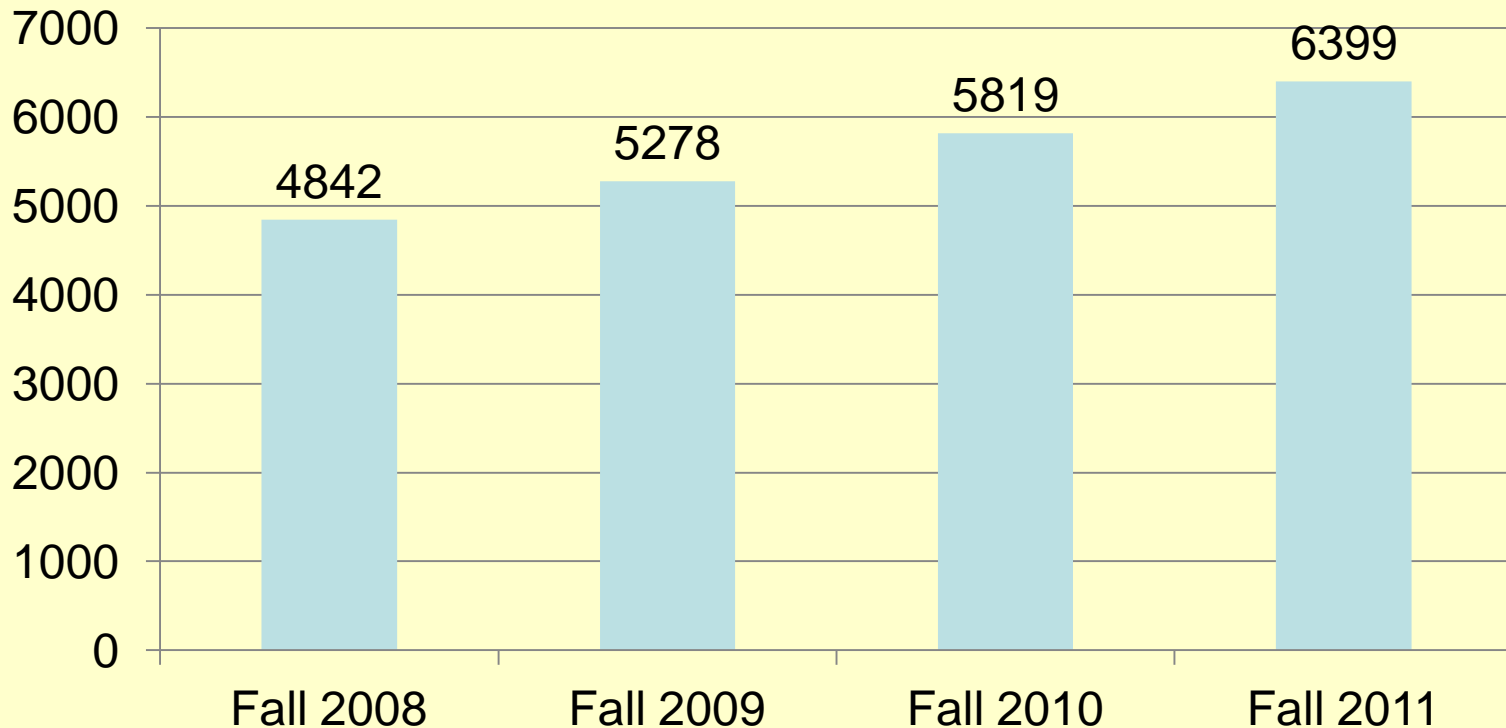
II. Discussion

ISG Budget Allocation + Donations



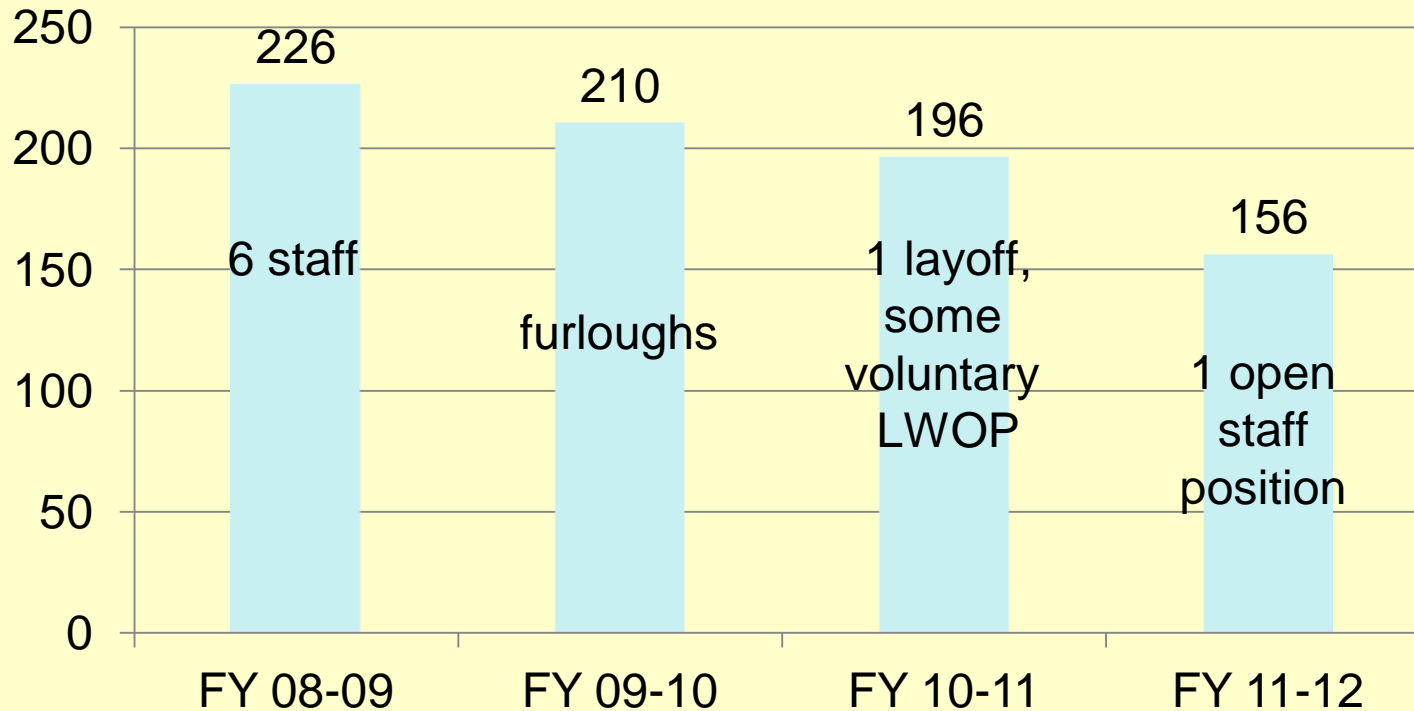
ISG Staff Reductions vs Course Enrollment

EECS Fall enrollments

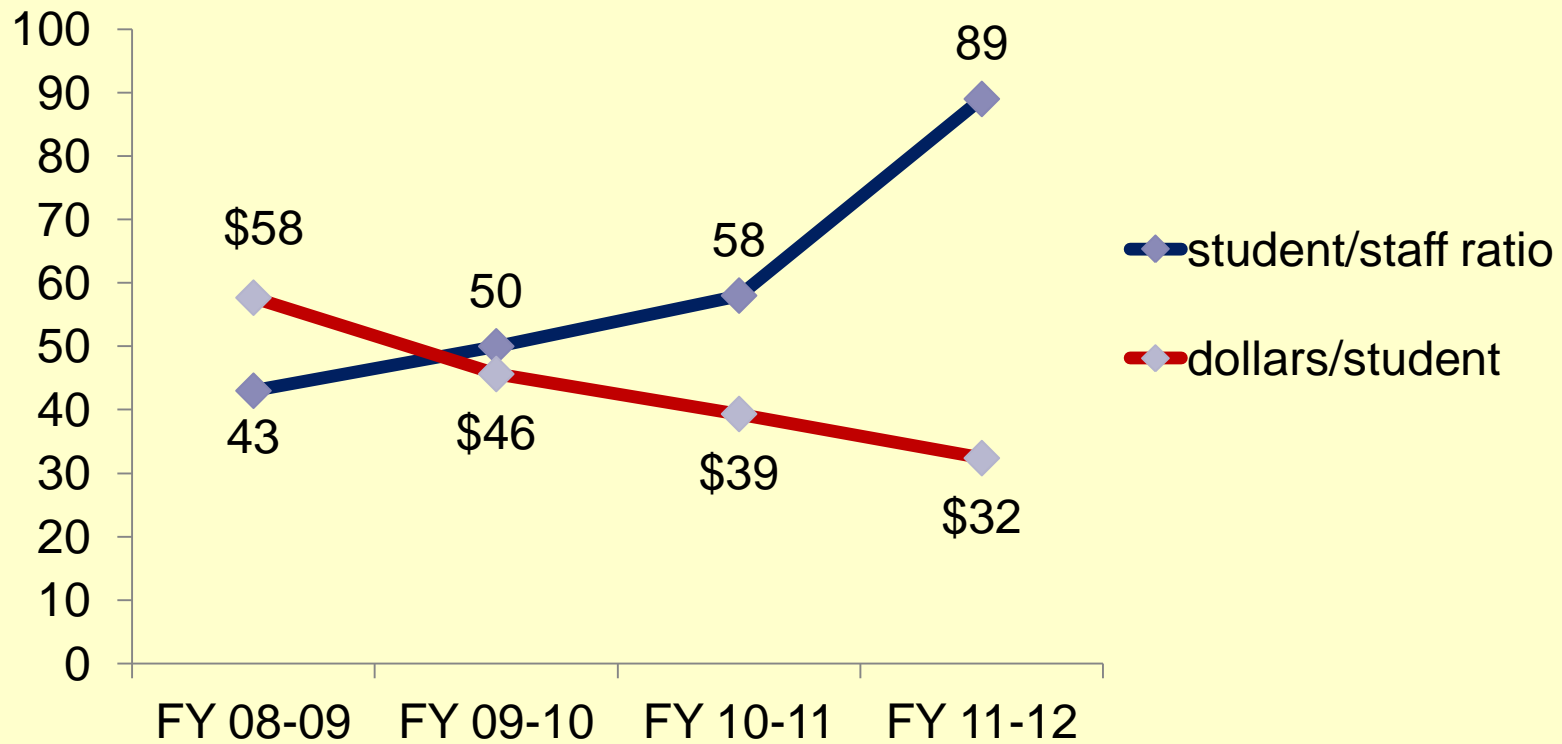


ISG Staff Reductions

ISG career staff hours/week



Less Funding, Less staff time per student



Computers – new...

140 Cory:	35 i7 PCs; TI grant (2012)	\$40K
353 Cory:	24 i7 PCs; Intel grant (2012)	\$30K
Icluster:	26 servers; Intel & Google grants (2007, 2012)	\$105K
330 Soda:	30 dual-quad Xeon, Tesla; Intel grant (2010)	\$90K
200 SDH:	30 MacsPros; Apple grant (2009)	\$135K
Sun servers:	2 SPARC T5220s; SUN AEG grant (2009)	\$42K
	2 Opteron X4600; SUN AEG grant (2009)	\$23K

Total value of Instructional computers: \$1M

..and old

SunRays:	271, 273, 277 Soda, 199 Cory (2000) ...\$50K
Renovate 105 Cory:	new PCs, furniture, wiring, etc (2002) ...\$50K
Linux servers:	old Broadcom systems (2003)\$ 30K
Windows servers:	Iserver[123] for RDC (2003)\$30K
Video streaming:	Netshow01 - Windows only (2003)\$10K
Solaris servers:	Cory, Pulsar, Quasar (2004) \$90K

For a 5-year replacement cycle: $\$1\text{MK}/5 = \200K per year

New Equipment Wish List

3 Sun SPARC (UNIX) servers (\$30K each)

3 X86 (UNIX or Windows) servers (\$12K each)

Virtual Hosting server:

- 1 Sun Fire X4450 Server w/ 24-core cpu, 64-GB RAM (\$24K)
- 100-user license for Thinsy VM server software (\$???)
- Students in several programming classes would be issued a persistent virtual computer on which they could safely develop programs that have special security or performance risks. Users could include EE122 (network protocols), CS186 (database and WEB servers) and CS161 (computer security) , etc.

New lab for EE149 (or EE128 if displaced by EE149)

Services & Planning

- SunRays & 4 Solaris servers are old: what next?
- Competition for newest systems
- Be more "agile" about deploying new servers
- Video Streaming and CMS WEB servers
- Masters in Eng, other new classes?

Instructional Support Group (ISG) Discussion

1. Demand on current clients, servers, rooms
2. Current limitations/Constraints - License, attached HW, GPU/graphics demand
3. Funding options - Dept, Corporate, Grant, OE, lab fee
4. Historical funding/staffing per student credit hour
5. Service model - drop-in display, client Pcs, Timesharing
6. Future directions

Instructional Support Group (ISG)

End of presentation

References:

<http://inst.eecs.berkeley.edu/~kevinm/budget>

<https://inst.eecs.berkeley.edu/~inst/reports>

<http://inst.eecs.berkeley.edu/~inst/iesglabs.html>

Recent Events

1) service interruption on Feb 8/9

LDAP and disk access failures affected all UNIX users for several hours on Wednesday night (6am-11pm); disk access failures affected CS186 through 9am the next day; they had an assignment due.

2) EE241 request for use of Icluster

Prof Nikolic requested use of some Icluster systems for custom Synopsys tools; previously used by CS250 (Asanovic); now used by CS294-1 (Canny). Controversy over rights to use systems.

A common factor:

unexpected migration from Solaris to Linux (for Postgres, Synopsys)