Spring 2011 Quarterly Report
Computer Lab Management

Prepared by Tim Leamy

Computer Lab Management (CLM) operates 18 computer rooms across the UC Davis campus. These consist of 11 computer classrooms and 7 open access labs with a total of 566 installed stations.

The 09-10 academic year was marked by campus budget issues leading to fewer open computer room hours, classes being cancelled, and an increase in printing rates. These changes had a large impact on CLM operations that continued throughout the 10-11 academic year. However, the campus is adjusting to the new reality and computer classroom reservations have rebounded from the 09-10 drop. CLM expects that faculty members will continue to adopt and integrate more educational technology into their classroom teaching and consequently the demand for technology-aided and technology-focused classes will grow. Therefore, CLM is continuing to look for ways to add computer classrooms.

Some of the significant items from Spring 2011 include:

- CLM has reduced the amount of open hours by 16.6% from Fall 2008. These cuts were driven by the ongoing campus budget crisis. This decrease in availability likely caused some of the drop in overall logins and printing we have seen during 09-10.
- The number of sheets printed Spring 2011 slightly to 887,805 down 3.5% from Winter 2011). There was a large decrease from the 08-09 printing levels due to a new printing rate implemented in Fall 2009. We expected that sheets printed would slowly increase as students become accustomed to the new rate. However, the total number of sheets printed is continuing to trend down. Since 60% of students reported they need to print over 50 sheets per quarter for academic purposes (Question 8 in http://clm.ucdavis.edu/pubs/survey/student-w11-1.html), this likely shows that the cost of printing in the computer rooms is forcing students to go elsewhere.
- The total number of logins decreased to 281,863, a 2.0% drop from Winter 2011. The overall drop in logins from 08-09 most likely due to a combination in the decrease of open hours and the Fall 2009 printing rate change decreasing demand. Surveys indicated that printing was the primary reason that many students used the open-access labs, and therefore a reduction in printing demand translates to fewer logins.
- CLM developed a plan to move the Meyer computer room functions to Hart and Hutchison. The Meyer Media lab was transitioned to 1101 Hart over the 10-11 academic year. We were able to devise a space swap that allows CLM to acquire additional space in Hutchison adjacent to our existing rooms in exchange for moving other IET departments to Meyer. CLM plans to renovate the Hutchison space to construct a computer classroom and then move the computer classroom from 1131 Meyer to Hutchison. These plans will be completed over Spring and Summer 2012 and the consolidation will allow CLM to save the Meyer student staffing costs while providing the save level of service to our clients.
- CLM prepared for Summer 2011 planned upgrades by purchasing hardware and software, implementing and testing new Windows 7 and OSX 10.6 configurations, and developing a project plan.
- CLM conducted a faculty survey about computer room use. The results are posted at http://clm.ucdavis.edu/pubs/survey/faculty_s11.html.

Statistical Summary

Utilization

Overall computer room utilization

Computer Lab Management operates 18 computer rooms at UC Davis. These computer rooms experience high utilization betweem10:00am to 5:00pm, which continues the trend from previous quarters. Most open access labs also experience wait lines. The graph below combines utilization Monday through Thursday.

Average Utilization versus Average Wait Line Length (M-R)
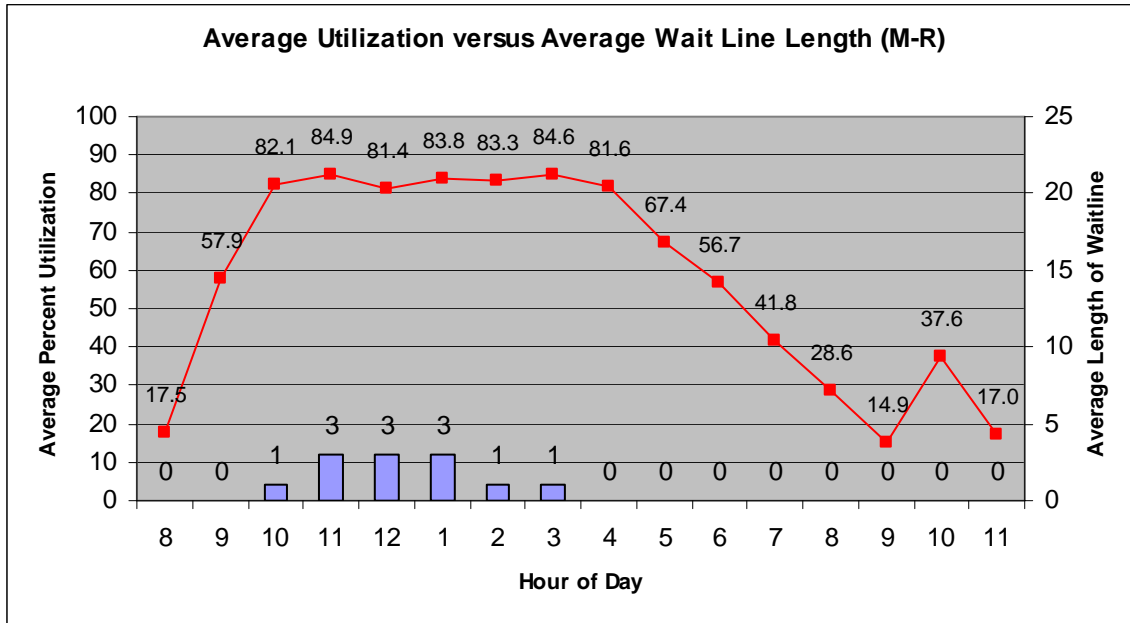
The wait line data shown is the average wait line for the entire quarter. The maximum wait line of 39 on May 31st is many times the average. Past student surveys show roughly only 25% of students would wait if there were line of 10 people. Therefore, CLM's wait line statistics are most likely not an accurate measure of demand during busy times.

Class Use

During Spring 2011 there were 3,959 class hours reserved in the computer classrooms. This was an increase of 188 hours over Winter 2011 and 238 hours over Spring 2010.

Spring Quarter Reservations
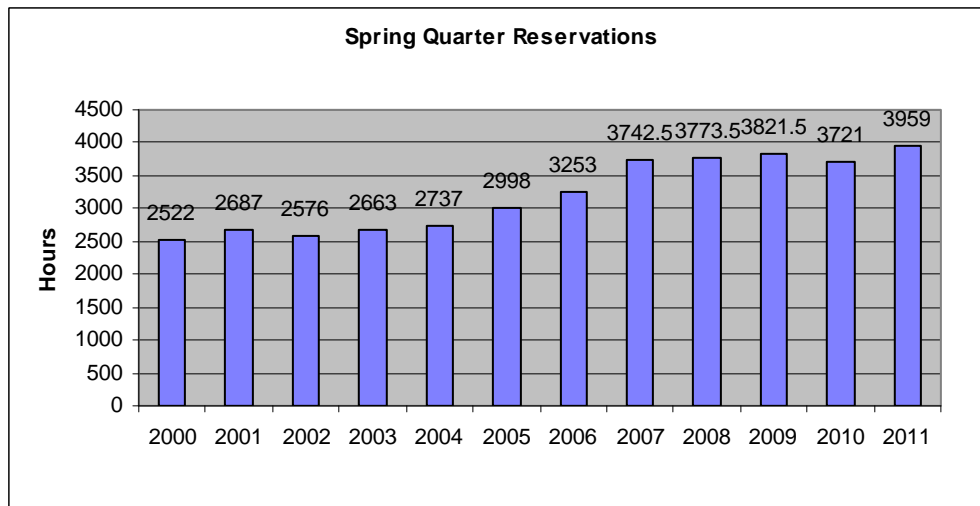
In addition, there were 149 class software installs and 86 class folders created during Spring 2011.

Number of Logins and Users

The total logins in Spring 2011 decreased to 281,863, a 2.0% drop from Winter 2011. The number of logins has dropped from 08-09, most likely due to a combination in the decrease of open hours and the printing rate change decreasing demand.

Total logins per quarter
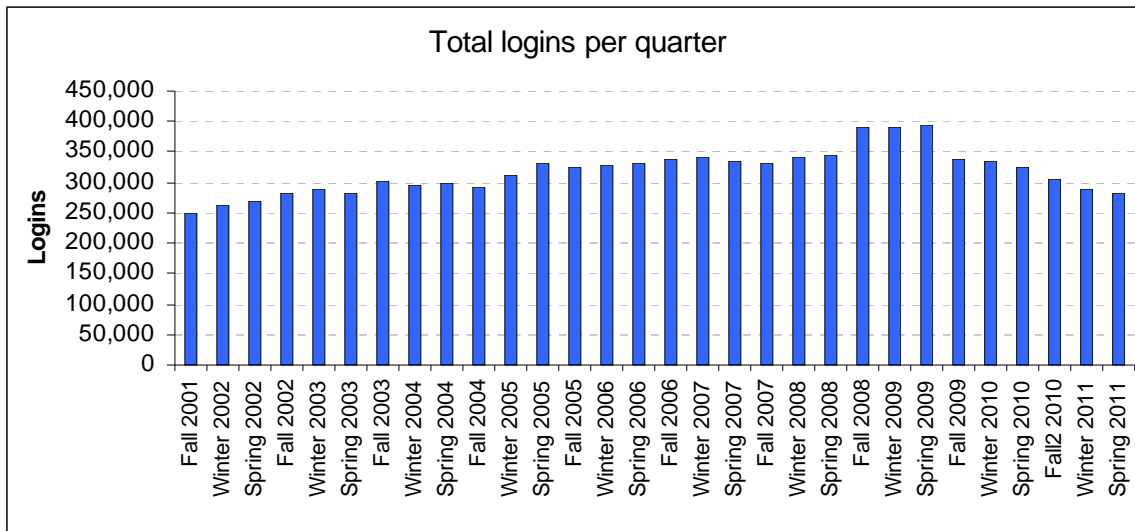
Unique Users

The number of unique clients decreased to 18,997 in Spring 2011. This is a decrease of 440 clients from Winter 2011. Of these, 18,499 were students. The decrease is normal as the total number of students at UCDavis typically drops from Fall to Spring quarter.

Number of Unique Clients per Quarter
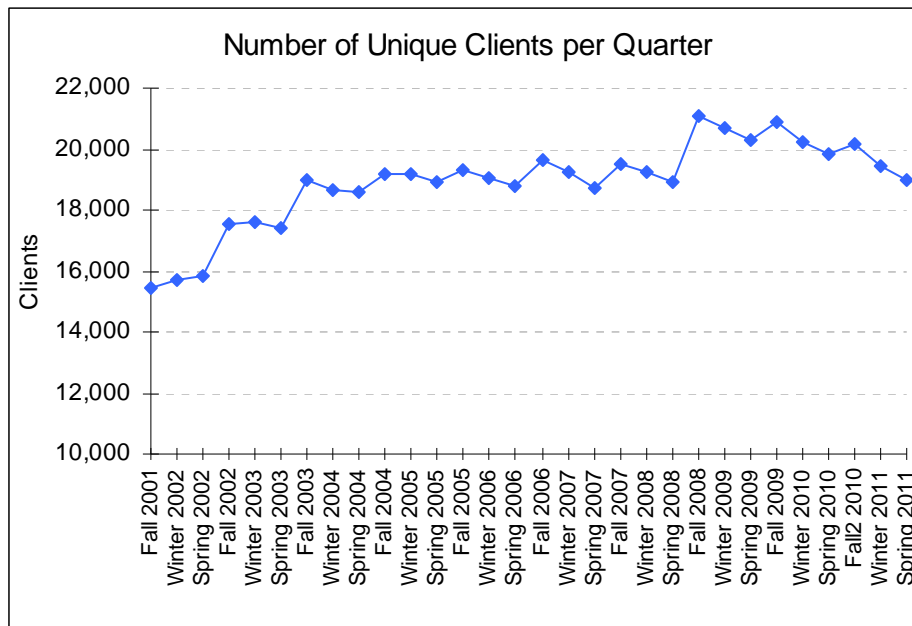
Printing

The total sheets printed in Spring 2011 decreased to 887,805. The average sheets printed per client (of those who printed) was 54.26. The large decrease from 08-09 was due to the change in printing rates at the start of Fall quarter.

Sheets Printed per Quarter
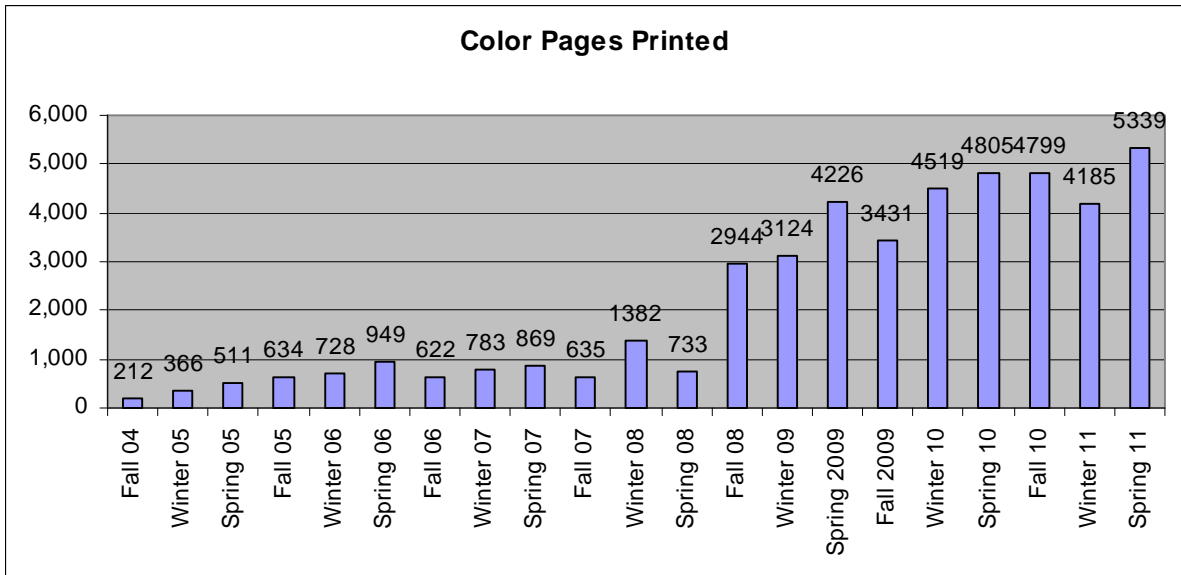
Number of Sheets - Millions

(Bar chart showing sheets printed per quarter from Fall 2001 to Winter 2011, with values ranging from approximately 0.9 to 1.7 million sheets)
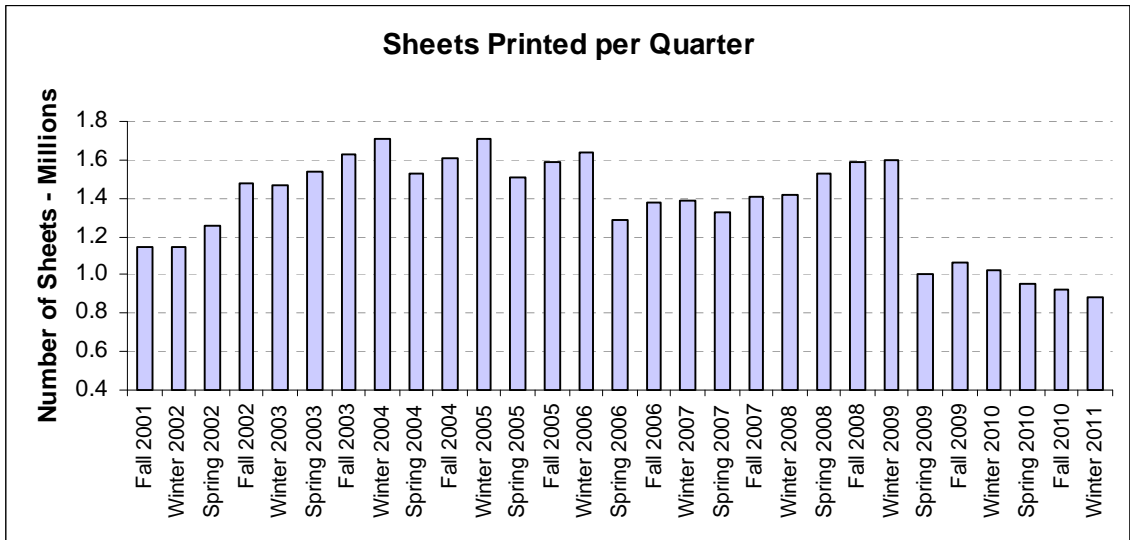
In addition, there were 5,339 color pages printed, an increase of 1,154 from Winter 2011. This is the highest total of color pages ever printed per quarter.

Color Pages Printed

(Bar chart showing color pages printed from Fall 04 to Spring 11)

Quarter	Value
Fall 04	212
Winter 05	366
Spring 05	511
Fall 05	634
Winter 06	728
Spring 06	949
Fall 06	622
Winter 07	783
Spring 07	869
Fall 07	635
Winter 08	1382
Spring 08	733
Fall 08	2944
Winter 09	3124
Spring 2009	4226
Fall 2009	3431
Winter 10	4519
Spring 10	4805
Fall 10	4799
Winter 11	4185
Spring 11	5339

There were 2,323 wireless print jobs, a decrease of 178 from Winter 2011. There were 304 unique clients who printed though the wireless printing system. The drop in wireless printing usage from 08-09 level is most likely due to the overall drop in printing caused by the printing rate increase.

Wireless Print Jobs

(Line chart showing wireless print jobs from Fall 2006 to Spring 2011, peaking around Spring 2009 at approximately 8000, then declining)