

Spring 2015 Quarterly Report

Includes Review of 14-15 Annual Data

Computer Lab Management

Prepared by Tim Leamy

Computer Lab Management (CLM) operates 20 computer rooms across the UC Davis campus. These consist of 14 computer classrooms and 6 open access labs with a total of 615 installed stations. CLM also manages seven departmental computer rooms with 178 installed stations for the School of Education, the UC Davis Language Center, and The Arts Admin Group.

The demand for computer classrooms is increasing as UC Davis faculty members continue to adopt and integrate more computer based educational technology into their classroom teaching. Therefore, CLM is continuing to look for ways to add computer classrooms.

Some of the significant items from Spring 2015 include:

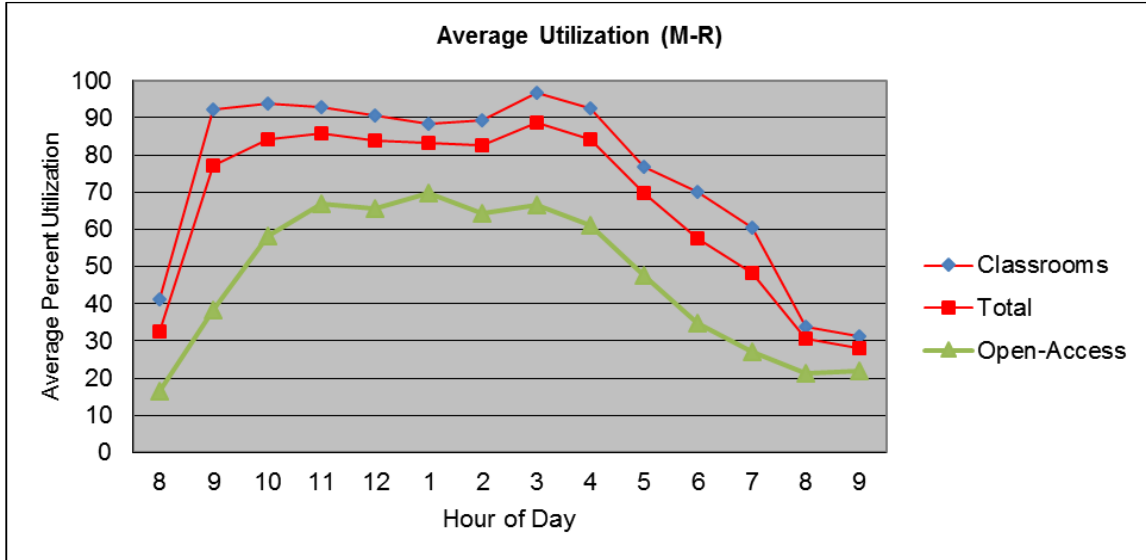
- The number of class hours increased significantly from Spring 2014 (5,068.5) to Spring 2015 (5,760.75), an increase of 14%. This was the highest value for Spring quarter in CLM history and part of the overall trend of increasing classroom reservations.
- The annual data shows there was a huge jump of class hours scheduled in the computer classrooms - an increase of 55% in just 3 years. The growth is due to the addition of 3 new classrooms in SCC and Shields Library as well as more hours reserved in each classroom.
- There is more demand than CLM can accommodate in our classrooms. Starting in Spring 2015 CLM started tracking “unmet” computer classroom demand. For Spring 2015 through Winter 2016 it averages 124 hours per week of unfulfilled reservation requests or roughly 3 classrooms. Therefore, CLM will continue to investigate possibilities to add more computer classrooms in the future.
- The number of logins has remained fairly consistent over the past few years, but is lower than the peak in 08-09. The number of unique users is slowly increasing, most likely keeping pace with the increasing number of students. The decrease in number of logins has several likely causes:
 - The Fall 2009 printing rate change decreased printing demand and therefore logins.
 - Increased ownership of laptops and smartphones reducing student need for accessing the computer rooms.
 - Increased reserved class hours reducing the time available for drop-in student use.
 - Decrease of open hours – CLM dramatically cut evening and weekend available hours in response to budget issues.
- CLM prepared for Summer 2015 upgrades by purchasing hardware and software, implementing and testing software configurations, and developing a summer project plan. This summer we plan to upgrade to OX 10.10 “Yosemite” and the 64-bit version of Windows 7. These operating system upgrades required a significant amount of testing and preparation to ensure we could roll them out without disrupting classes or our clients’ work.
- Use of the IET Virtual Lab continued to grow. It was used 10,152 times by 1,422 unique clients. Both were the highest values ever for the Virtual Lab service. There were 5,072 denied connections to the Virtual Lab since there were no free stations. Most denied connections were during the day when there are only very limited number for computers available. CLM will increase the number of computers available during the day over Summer 2015.
- CLM conducted a faculty survey about computer room use. The results are posted at http://clm.ucdavis.edu/pubs/survey/faculty_s15.html.

Spring 2015 Statistical Summary

Utilization

Overall computer room utilization

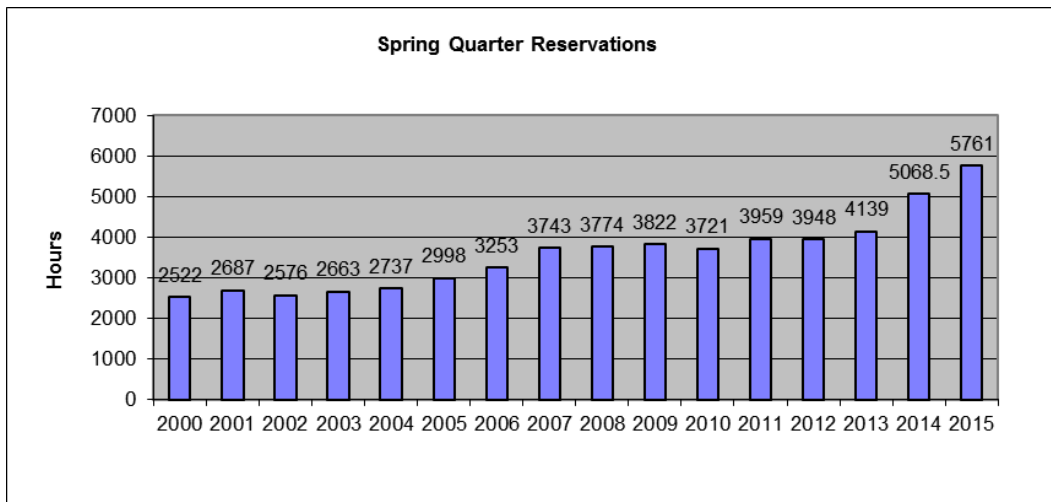
Computer Lab Management operates 20 computer rooms at UC Davis. The general trend of high usage from 10am to 5pm continued during Spring 2015. The graph below shows average utilization for classrooms, open-access labs and all rooms for Monday through Thursday.



Classrooms use is very high – averaging over 90% for most of the peak class times. Open-access utilization is lower, but since it is an average across the entire quarter it doesn't give a sense of peak use. Many of the open-access labs also experience wait lines during busy times of the quarter. The maximum wait line was 24 people waiting for a computer on May 27th.

Class Use

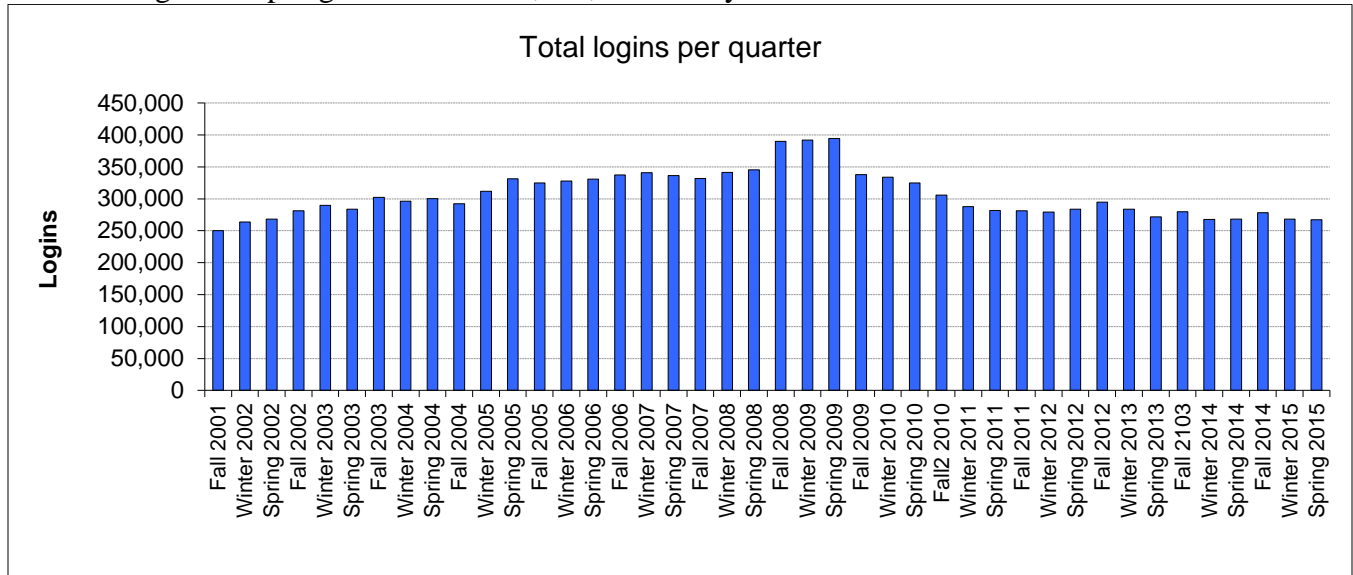
During Spring 2015 there were 5,760.75 class hours reserved in the computer classrooms. The large increase from Spring 2014 is due to the two new classrooms in Shields Library and increased overall demand.



In addition, there were 244 class software installs and 148 class folders created during Spring 2015.
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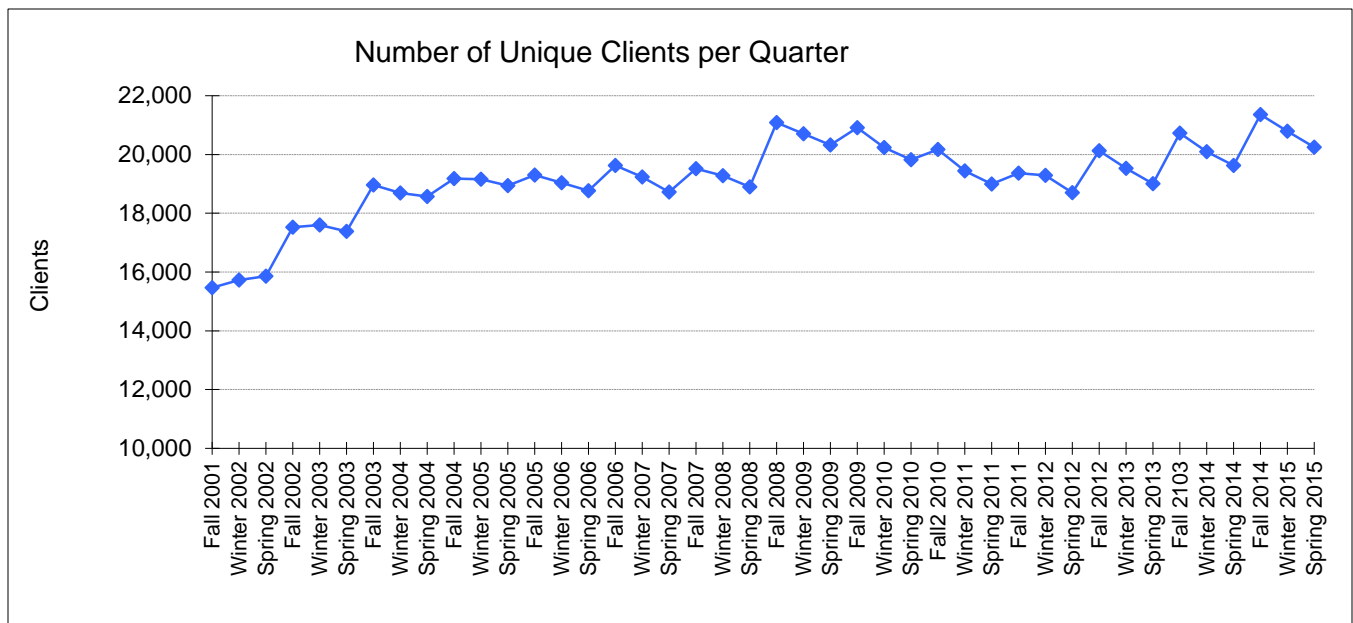
Number of Logins and Users

The total logins in Spring 2015 were 267,289, essentially the same as Winter 2015.



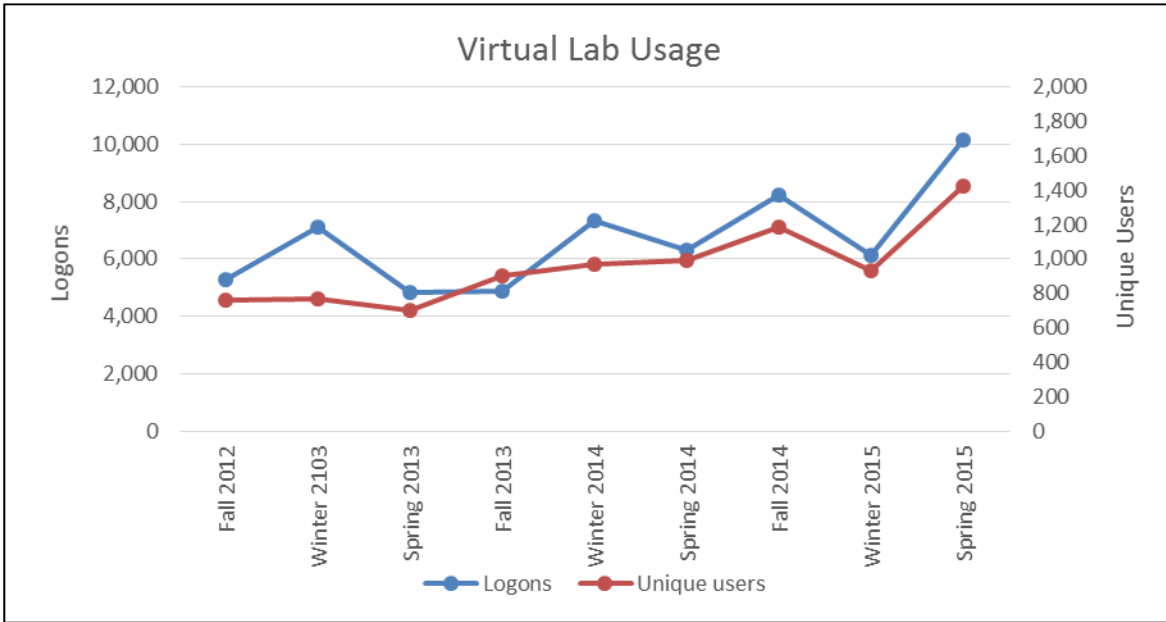
Unique Users

The number of unique clients decreased to 20,243 in Spring 2015. Of these, 19,669 were students. This is a decrease of 552 clients from Winter 2015. The decrease is normal as the total number of students at UC Davis typically drops from Fall to Spring quarter.



Virtual Lab Users

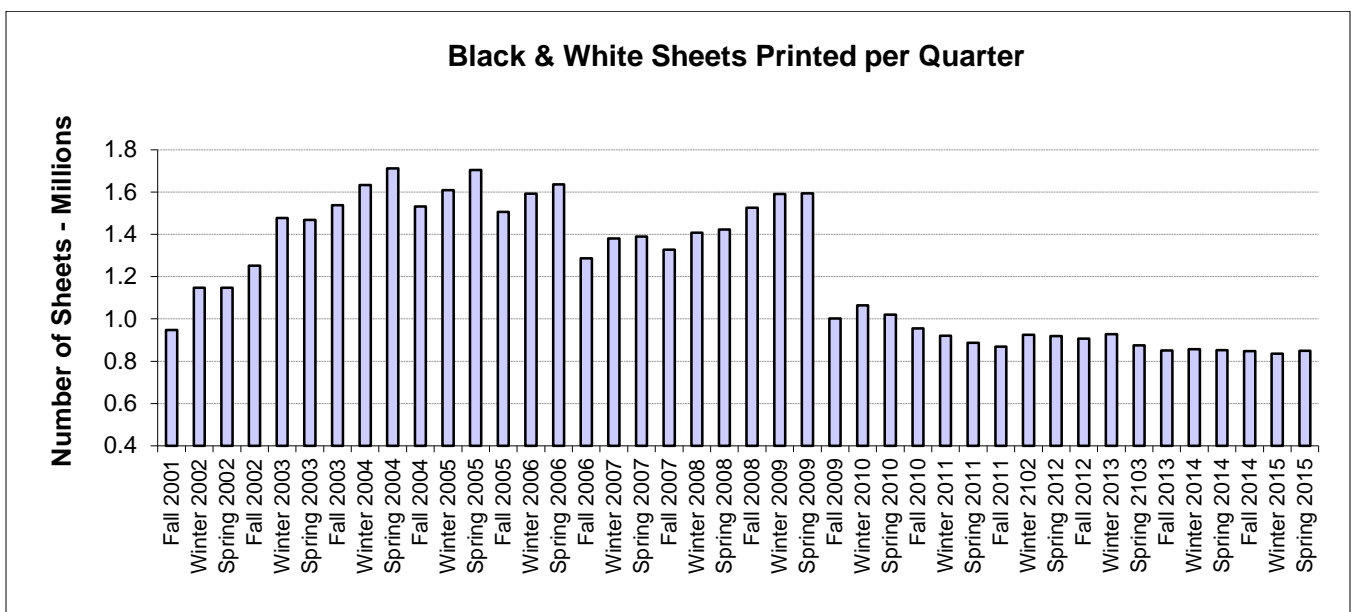
The IET Virtual Lab was used 10,152 times by 1,422 unique clients. Both were the highest values ever for the Virtual Lab service.



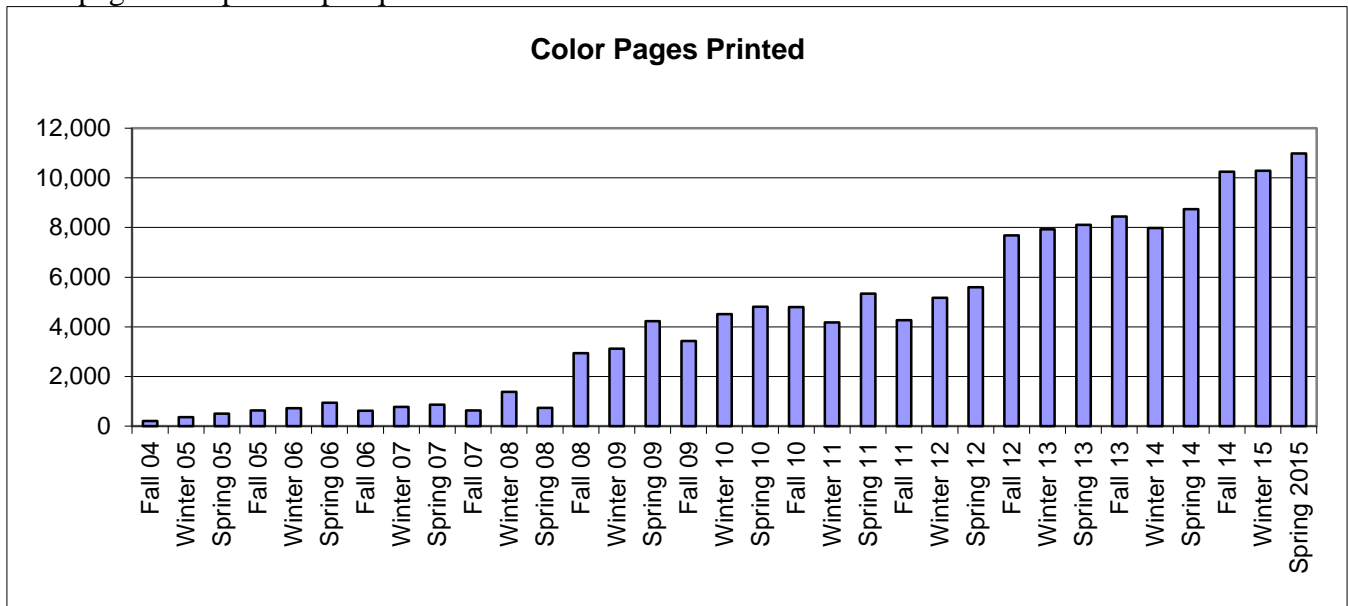
There were 5,072 denied connections to the virtual lab since there were no free stations. Most denied connections were during the day when there are only very limited number for computers available. CLM will increase the number of computers available during the day over Summer 2015.

Printing

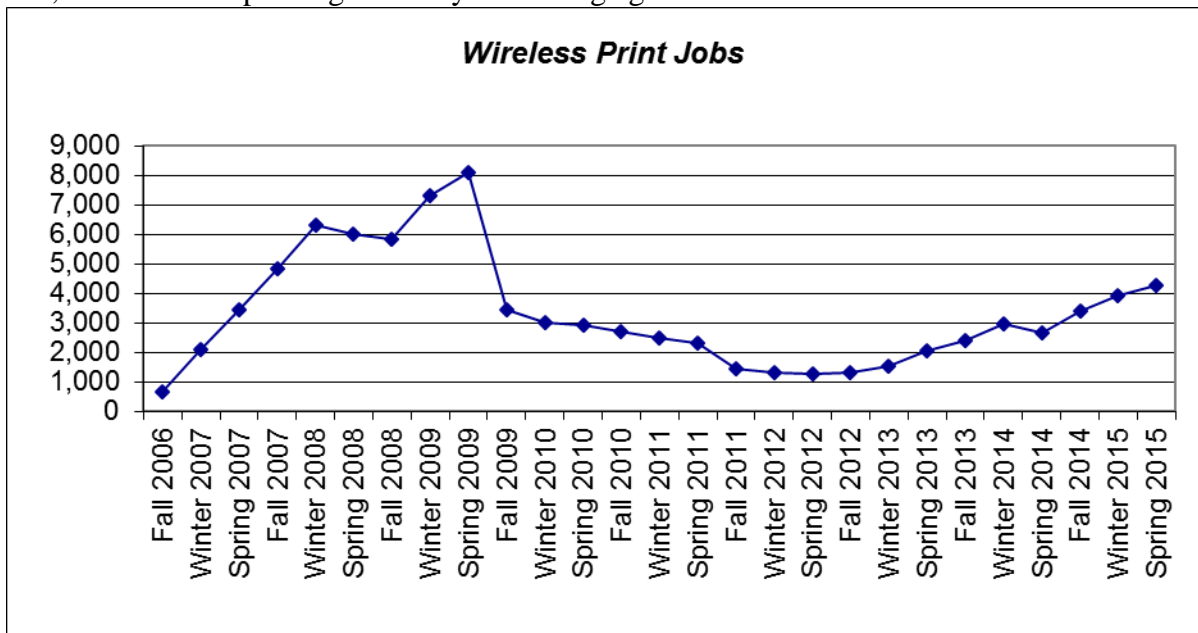
The total sheets printed in Spring 2015 increased slightly to 849,466 (an increase of 1.6%). The average sheets printed per client (of those who printed) was 49.33. The amount printed was fairly consistent over the 13-14 & 14-15 academic years. The large decrease from 08-09 was due to the change in printing rates at the start of Fall 2009.



There were 10,981 color pages printed, an increase of 700 from Winter 2015. This is the highest total of color pages ever printed per quarter.



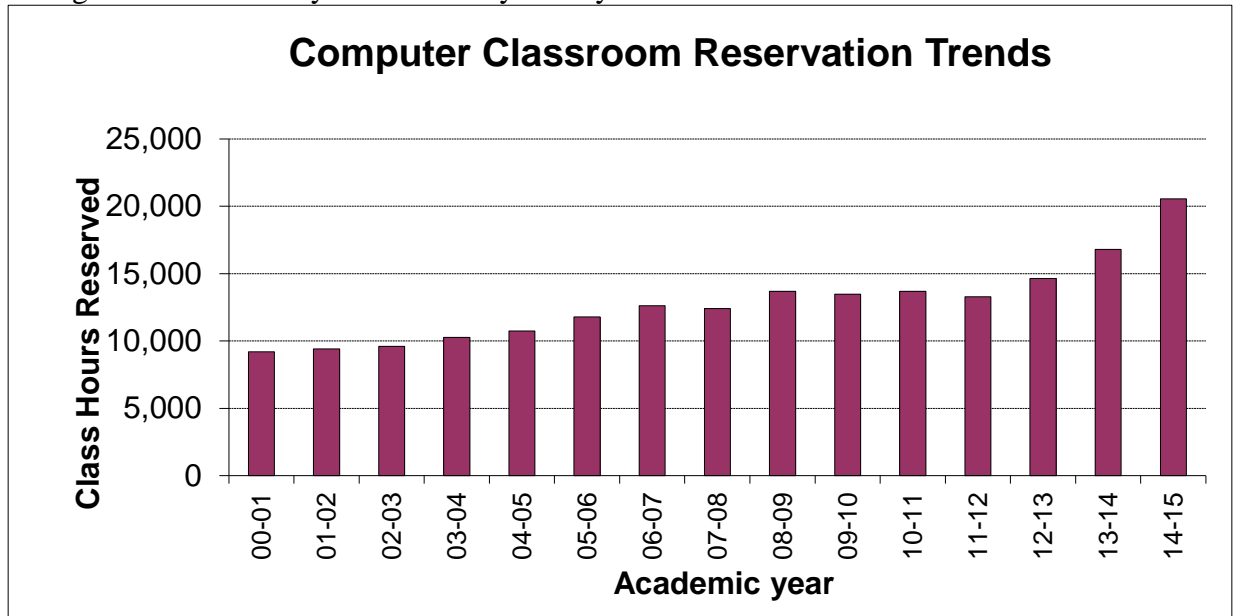
There were 4,279 wireless print jobs, an increase of 359 from Winter 2015. There were 503 unique clients who printed through the wireless printing system. The drop in wireless printing usage from the 08-09 level is most likely due in part to the overall drop in printing caused by the printing rate increase. However, now wireless printing is slowly increasing again.



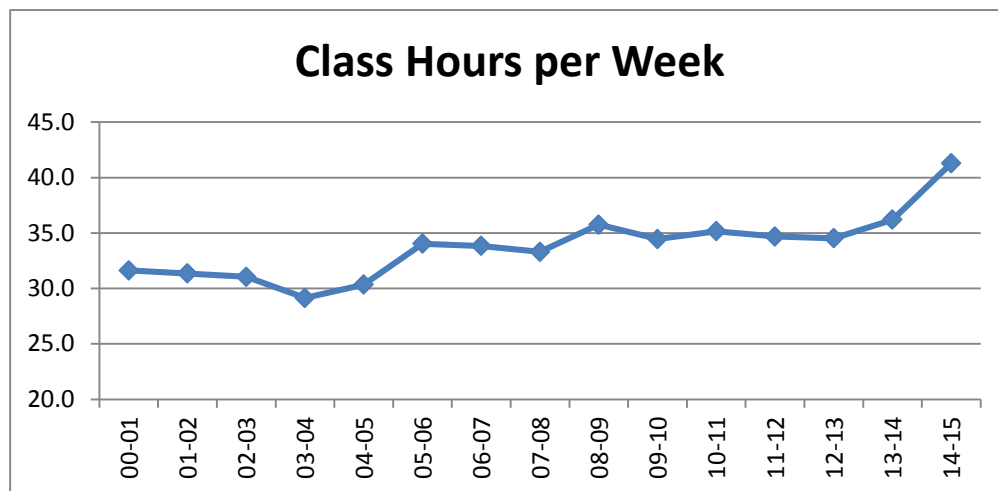
Review of Annual Data

CLM includes annual trends in this quarterly report since Spring quarter is the end of the academic year.

The overall computer classroom reserved hours increased dramatically to 20,541 in 14-15. There has been a large increase recently – 55% in only three years.

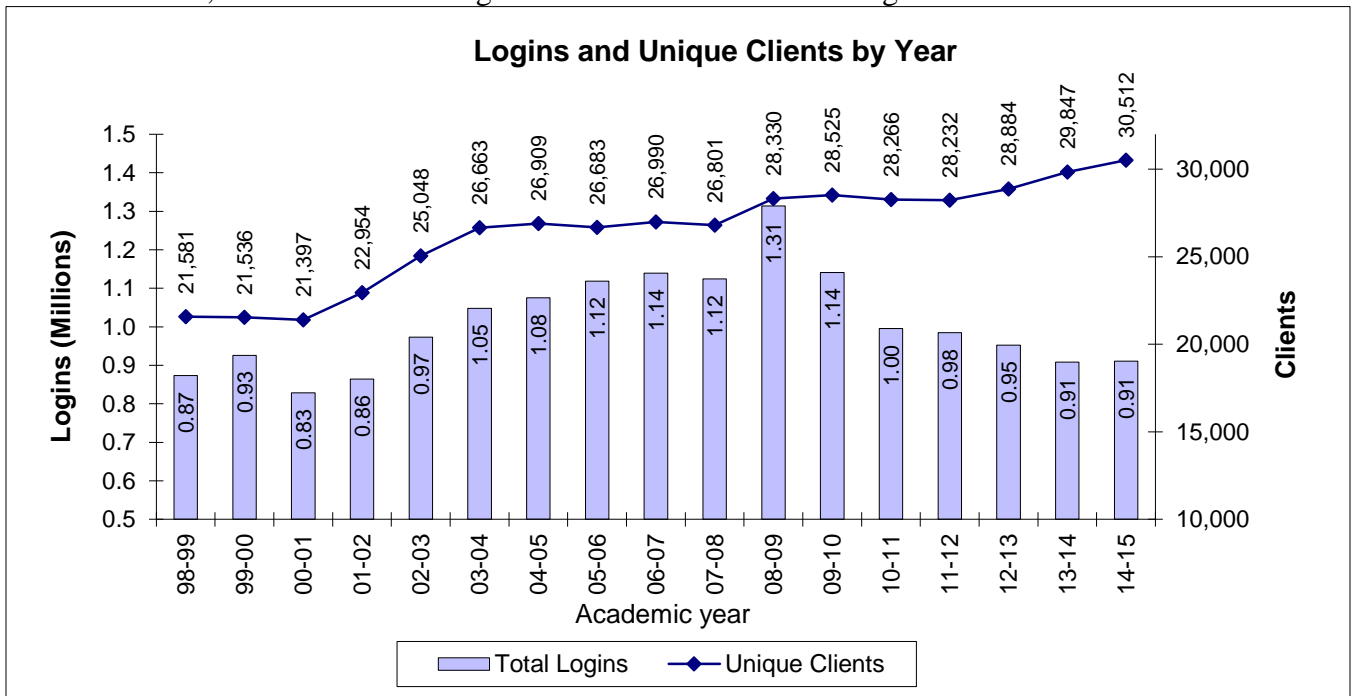


The growth is partially due to the addition of 3 new classrooms in SCC and Shields Library since 2012. However, the average number of class hours per week also showed a significant increase this past year. The need for classrooms has grown so much that faculty and departments are willing to schedule classes at the less desirable times (evenings & Friday afternoon) which were avoided previously.



There is more demand than CLM can accommodate in our classrooms. Starting in Spring 2015 CLM started tracking “unmet” class demand. For Spring 2015 through Winter 2016 it averages 124 hours per week or roughly 3 classrooms. Therefore, CLM will continue to investigate possibilities to add more computer classrooms in the future.

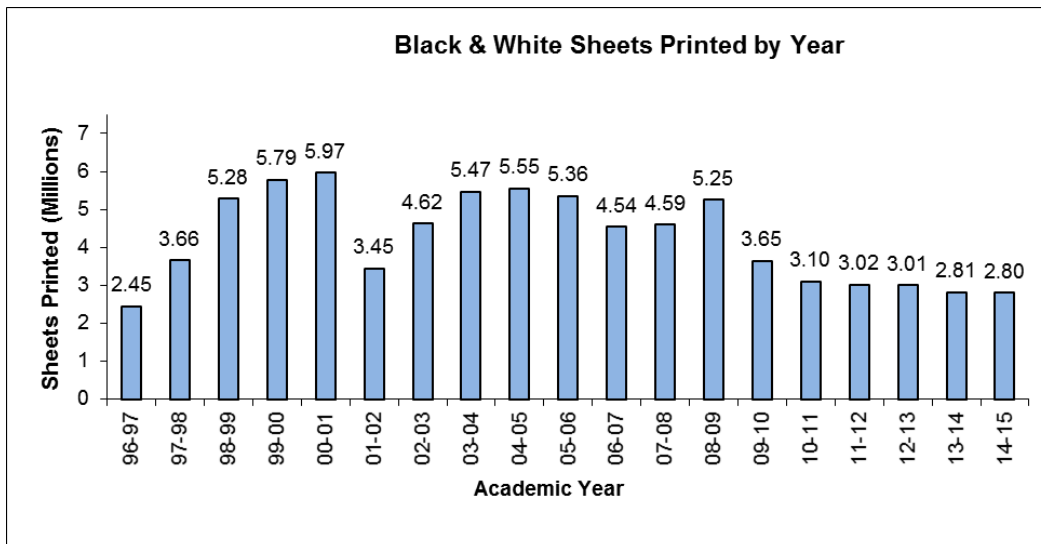
The total number of logins is essentially the same as 13-14. The number of unique clients increased by 665 from 13-14, which makes sense given that UC Davis is admitting more students.



The decrease in number of logins from 08-09 has several likely causes:

- The Fall 2009 printing rate change decreased printing demand and therefore logins.
- Increased ownership of laptops and smartphones reducing student need for accessing the computer rooms.
- Increased reserved class hours reducing the time available for drop-in student use.
- Decrease of open hours – CLM dramatically cut evening and weekend available hours in response to budget issues.

The number of black & white sheets printed per year dropped dramatically from 08-09 due to the printing rate increase in Fall 2009. However, the sheets printed have appeared to level out in recent years. We expected that sheets printed would drop significantly initially but then slowly increase as students become accustomed to the new rate. It remains to be seen if the printing levels will increase in the future.



The number of color pages printed per year has grown dramatically over the past few years. CLM increased the number of rooms with color printers in Summer 2008 and Summer 2012 which led to the large jumps those years.

