# Spring 2019 Quarterly Report Includes Review of 18-19 Annual Data Computer Lab Management

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Computer Lab Management (CLM) operates 22 computer rooms across the UC Davis campus. These consist of 15 computer classrooms and 7 open access labs with a total of 668 installed stations. CLM also manages eight departmental computer rooms with 208 installed stations for the School of Education, the UC Davis Language Center, and The Arts Admin Group.

Some of the significant items from Spring 2019 include:

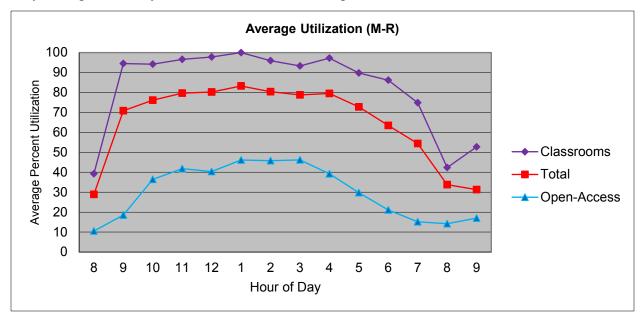
- CLM opened a new computer classroom in 0347 Storer at the beginning of the quarter. Since the room was not ready for classes at the start of the quarter it wasn't scheduled normally. So there were only 6 hours of classes scheduled all Spring quarter. However, the classroom will be scheduled normally starting in Summer 2019. For example, it is schedule 48 hours per week in Fall 2019.
- The computer classrooms were reserved for 21,091.75 hours in 18-19, which is close to the average of 20,912 over the past five years. The annual data shows increases of scheduled class hours whenever we added more computer classrooms. Therefore we expect a jump in 19-20 with the addition of 0347 Storer.
- The demand for computer classrooms is increasing as enrollment increases and faculty members
  continue to adopt and integrate more computer based educational technology into their classroom
  teaching. CLM continued to work with Teaching & Learning Complex (TLC) building
  committee on computer classrooms in the new building. The building plans are slowly being
  finalized.
- Over the past few years the open-access utilization and waitlines have been decreasing. There is
  a long term trend of decreasing drop-in use. However, classroom demand remains very high.
  Therefore, CLM will analyze our spaces to determine if any open-access lab can be converted
  into a computer classroom.
- CLM prepared for Summer 2019 upgrades by purchasing hardware and software, implementing and testing software configurations, and developing a summer project plan. The major upgrades this summer are upgrading all the Macs to masOS Mojave (10.14), all the PCs to Windows 10 Enterprise 2019 LTSC, and Adobe CC 2019.
- CLM conducted a faculty survey about computer room use. The results are posted at https://computerrooms.ucdavis.edu/pubs/survey/faculty\_s19.html.

# **Spring 2019 Statistical Summary**

#### **Utilization**

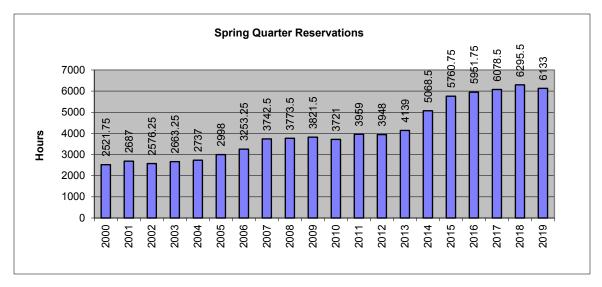
#### Overall computer room utilization

Computer Lab Management operates 21 computer rooms at UC Davis. The graph below shows average Monday through Thursday utilization for classrooms, open-access labs and all rooms.



The general trend of high usage from 9am to 5pm continued during Spring 2019. Classroom use is very high – averaging 96% from 9am to 5pm. In recent years classroom utilization 6-10pm has significantly increased due to increasing class demand. Open-access utilization is substantially lower.

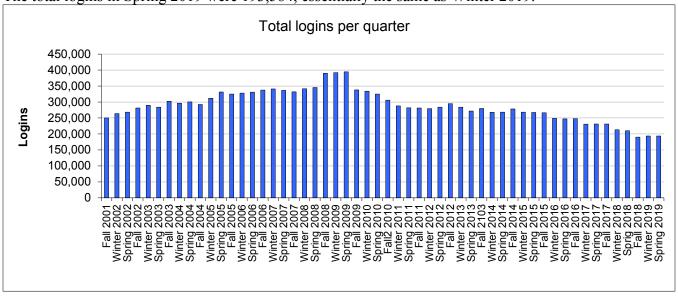
**Class Use** During Spring 2019 there were 6,133 class hours reserved in the computer classrooms.



In addition, there were 275 class software installs and 152 class folders created during Spring 2019.

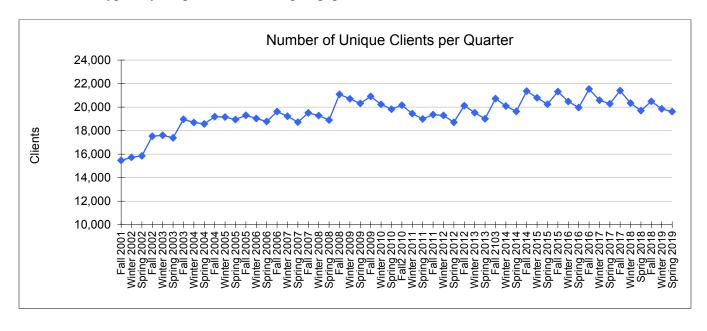
### **Number of Logins and Users**

The total logins in Spring 2019 were 193,584, essentially the same as Winter 2019.



### **Unique Users**

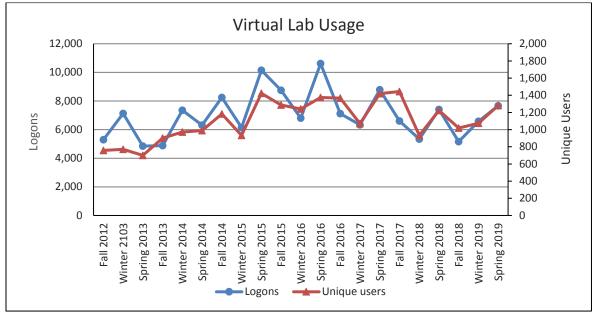
The number of unique clients decreased to 19,625 in Spring 2019. Of these, 19,147 were students. This was a decrease of 229 clients from Winter 2019. The decrease is normal as the total number of students at UC Davis typically drops from Fall to Spring quarter.



#### **Virtual Lab Users**

The IET Virtual Lab was used 7,660 times by 1,282 unique clients. Spring quarters typically have higher use than other quarters, so we assume the classes during Spring quarter must make heavier use of

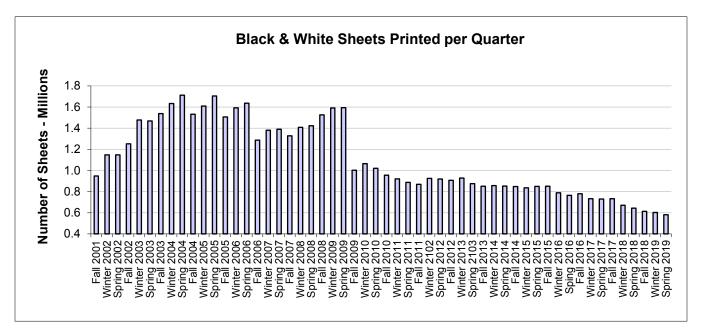
specialized software.

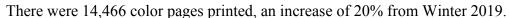


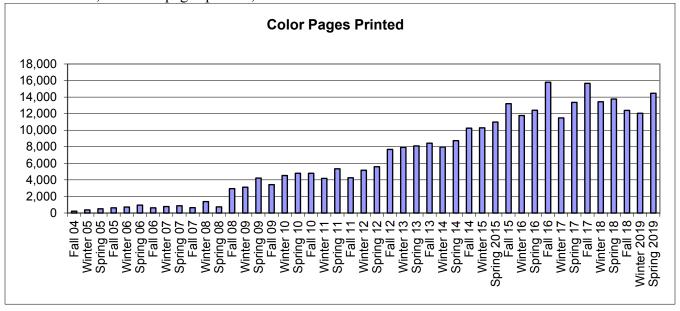
There were 847 denied connections to the virtual lab since there were no free stations. Most denied connections were during the day when there are only a very limited number for computers available.

# **Printing**

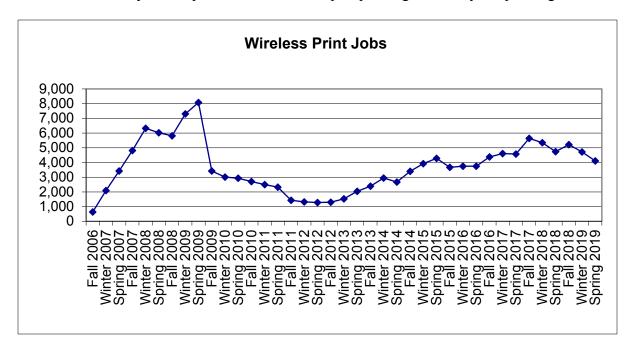
The total sheets printed in Spring 2019 decreased to 581,328 (a decrease of 3.6%). The average sheets printed per client (of those who printed) was 35.58. The large decrease from 08-09 was due to the change in printing rates at the start of Fall 2009.







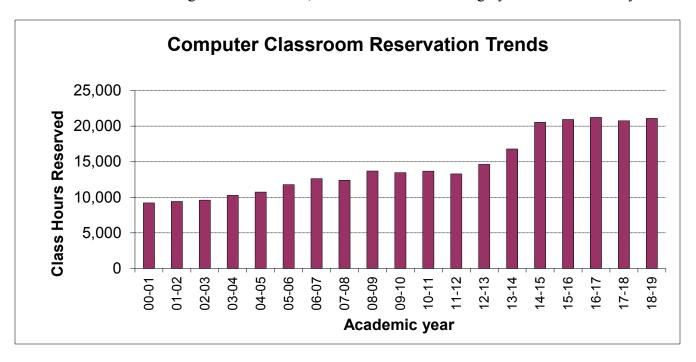
There were 4,109 wireless print jobs, a decrease of 606 from Winter 2019. There were 588 unique clients who printed though the wireless printing system. The drop in wireless printing usage from the 08-09 level is most likely due in part to the overall drop in printing caused by the printing rate increase.



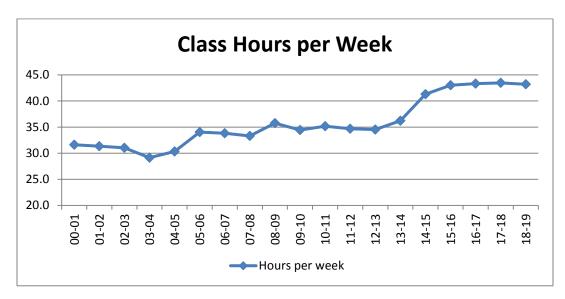
#### **Review of Annual Data**

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

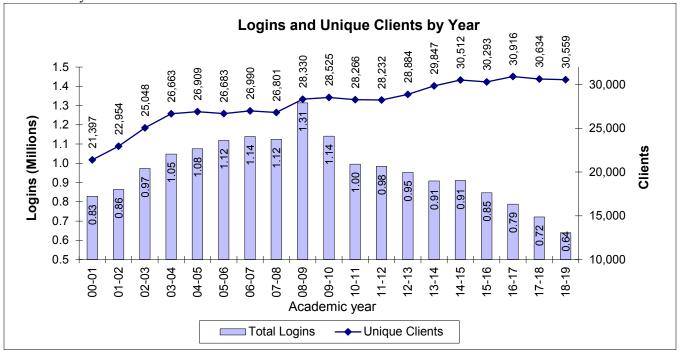
The overall computer classroom reserved hours increased slightly to 21,091.75 in 18-19, an increase of 2%. There was substantial growth until 14-15, but the total has been roughly constant after that year.



The growth was mostly due to the addition of 3 new classrooms in the SCC and Shields Library over 2012-2014. However, the average number of class hours has also increased significantly to around 43 hours per week during the same period. 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.



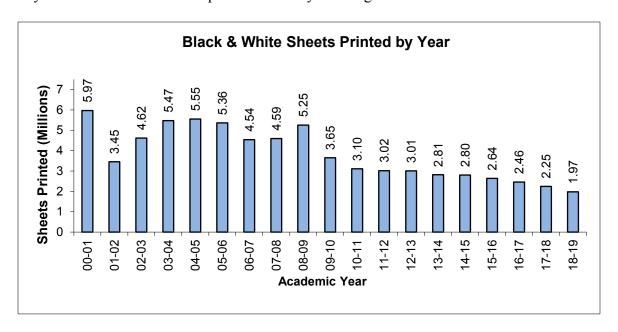
The total number of logins decreased by 11.5% from 17-18 to 18-19 and the number of unique clients decreased by 0.2%.



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.
- Decrease of open hours CLM dramatically cut evening and weekend available hours in response to budget issues.

The number of black & white sheets printed decreased by 12.2% to 1,973,342 sheets in 18-19. The sheets printed per year dropped dramatically after 08-09 due to the printing rate increase in Fall 2009. In recent years the number of sheets printed is slowly trending down.



The number of color pages printed per year grew dramatically from 07-08 through 15-16, but has since somewhat leveled off.

