IN THIS ISSUE

SPECIAL INVITATION

The IT Five-year Administrative Review Committee invites you to a **Town Hall** **meeting** on November 19 from 3:30 p.m. to 5:00 p.m. See page 4 for details.

The M.U. Station: It's a Lounge, Not a Lab

BY AVIVA LURIA

Second-year student Tiffany Hughes is pleased about the recent opening of The Station, the new computer lounge located in the Memorial Union's former East Conference Room. One of The Station's virtues, she says, is the absence of classes competing for computer time.

"You know you won't be interrupted," she says, looking up from the food chemistry lab report she's composing using Excel. "When you are in other computer rooms that are being used for classes, you're in the middle of something and then you have to save your work, leave, and go find another computer room."

Hughes is one of roughly 30 students logged in to The Station's Macintoshes and PCs on this Friday afternoon. The Station is, even at first glance, different from other campus computer rooms. Perched on ledges on the east and west walls are 10 computers that students can stand at to check email or print. These "Quick Stations" have a suggested time limit of 15 minutes. And by the east entrance, two collaborative stations offer additional chairs and space where groups of students can work together.


The Station is the product of ... ongoing collaborative efforts to find and secure space and funding for more campus computer rooms.

"A good deal of thought went into the design of The Station. We wanted to meet different needs," says Peter Blando, Information Resources Lab Management operations manager. Collaborative stations, for instance, are new to the UC Davis campus. "Some academic work requires student collaboration and access to computers, whether it's to write a paper or complete labwork. Other universities have similar stations — we're trying to meet the needs of students."

Second-year engineering student Bobby Roy is enthusiastic about the lounge. Although he owns a computer, Roy finds it convenient to drop by the Station when on campus. "They have everything here that you could ever ask for," he says. And like most busy students, he appreciates the quick turn-around.
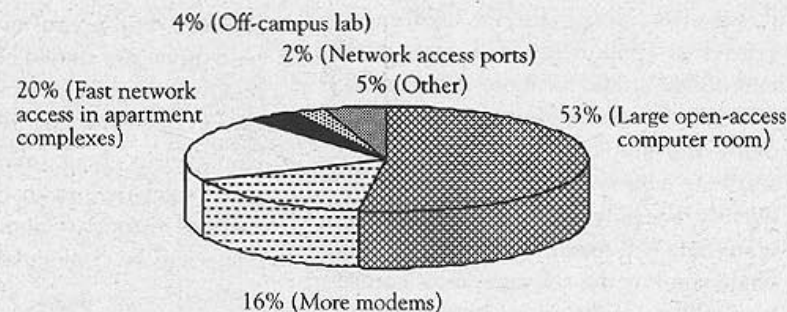
"My day ends at about 2 p.m., so I come here after that. Usually there are a lot of people here, but people leave really quickly," he says.

The turn-around can be explained by statistics gathered by Lab Management: At The Station, an average of 69% of PC sessions and 61% of Mac sessions are less than 15 minutes long. "A good portion of that is the Quick Access stations, which students use to check their email or print," says Blando. "That's the pattern in all the labs, whenever they're open access — nearly 60% use the computers for 30 minutes or less."
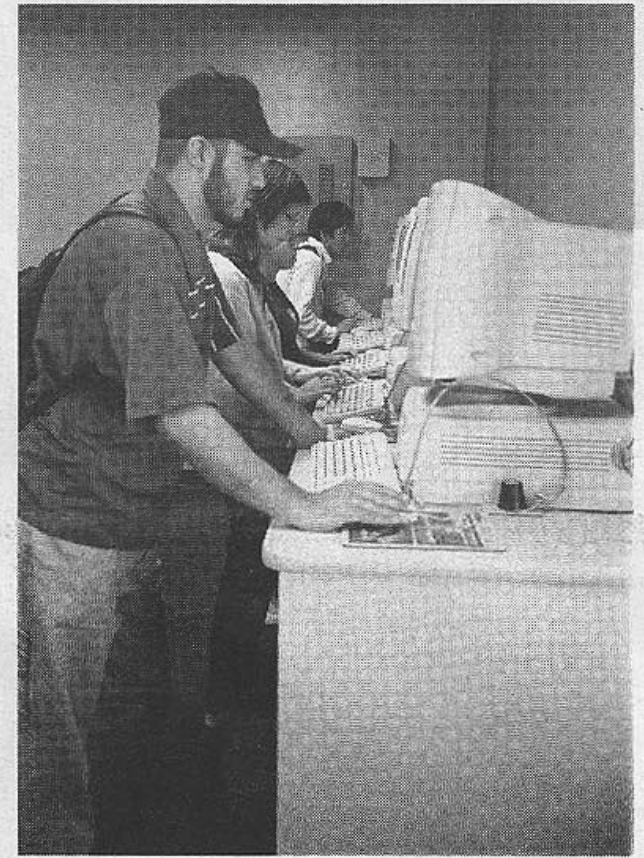
Students use the Quick Stations in the new M.U. computer lounge to check their email between classes.

The Station, however, is not like an ordinary computer room; it's a computer lounge. "It doesn't feel like a lab," says Scott Reed, president of ASUCD, which pushed for and helped fund and sponsor The Station in collaboration with Student Affairs and Information Technology's Information Resources. "A lab is concentrated primarily on schoolwork and the lounge has the capabilities for schoolwork, but you can also check your email, have fun in a lounge."

Despite the potential for fun, the motivation behind the inception of The Station stemmed from a serious need. Before The Station opened at the start of this quarter, campus computer rooms housed a total of 197 machines, amounting to a ratio of students to computers of 175.6:1. The Station's 19 Dell PCs and 15 PowerMac G3s, together with upgrades in some

Most Important Ways to Improve Computer Access
Winter 1998 Student Survey

4% (Off-campus lab)
2% (Network access ports)
5% (Other)
20% (Fast network access in apartment complexes)
53% (Large open-access computer room)
16% (More modems)

Based on 323 survey responses

Lab Management's Student Surveys reflect students' preference for a large open-access computer room on campus.

YOU ASKED

Q. I've heard that I could get a computer virus by reading an email message. Is this true? How can I protect my computer from infection?

A. The good news is that, in general, you cannot get a computer virus simply by reading an email message. A virus is defined as a malicious program designed to create copies of itself and attach these copies to other programs without the user's knowledge or permission (see glossary for more extended definition). An email message falls into the category of a data file, i.e., a file created by a computer program. Data files contain only information, not instructions that the computer performs; they are often referred to as "documents." Computer viruses cannot be spread through data files (except in the case of documents infected by the macro virus family; see glossary). The most common way a virus is transmitted through email is through an executable file (see glossary) attachment. This includes most commonly any file with a .EXE or .COM filename suffix (on the PC), or a .HQX or .BIN suffix (on the Mac). Executable Mac files generally have no suffix, unless they are compressed. Use caution when opening Word or Excel files sent as attachments to an email message, as they may be infected with a macro virus.

It is possible for your Web browser or email software to be configured to open automatically a Word or Excel file that you receive as an attachment. We strongly suggest that you configure your software to turn this option off, to prevent the possibility of a macro virus infection.

Signs that your computer may have a virus infection:

- Performance degradation: Your computer's operation is noticeably sluggish.
- Frequent system crashes.
- Memory problems or running out of disk space unexpectedly.
- Unusual file behavior: Files appear on your drive and you don't know where they came from, or change in size without any apparent cause.

Virus Hoaxes

If you get an unsolicited email message claiming to inform you about a new virus on the loose, don't panic. A large percentage of such messages are hoaxes (examples include t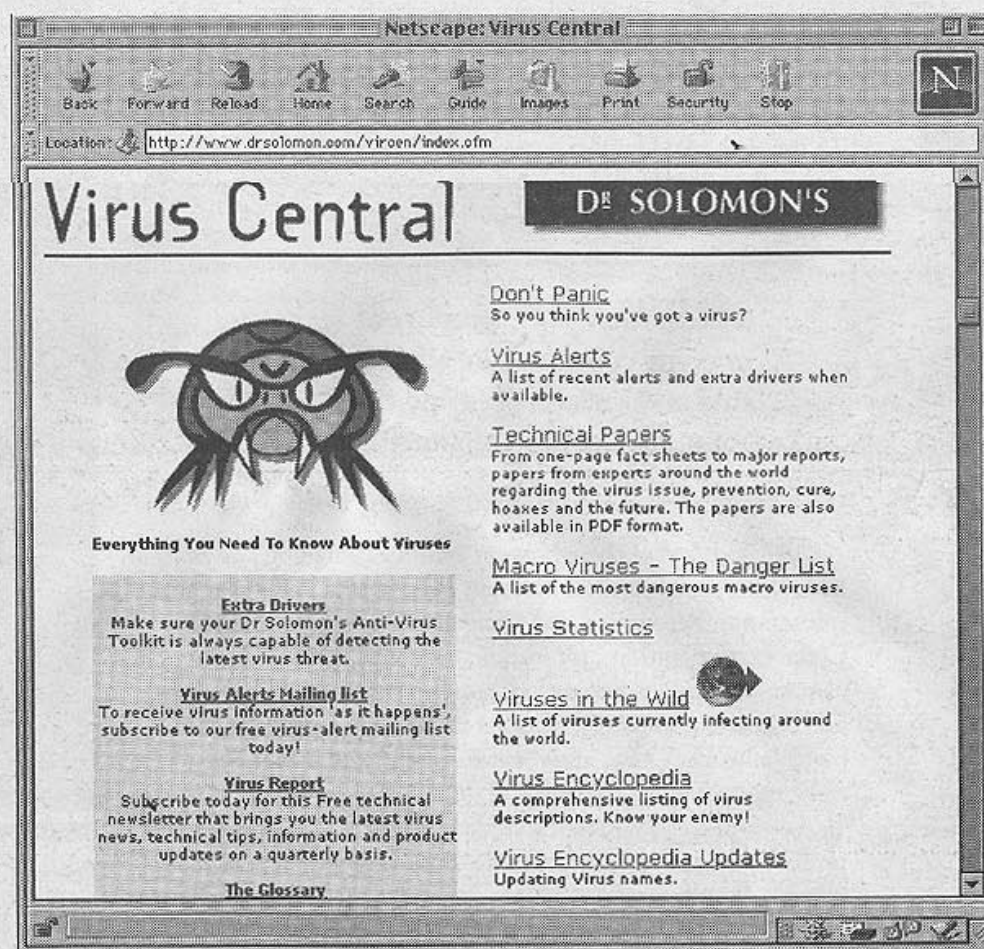he "Good Times," "Penpal," and "Win a Holiday" hoaxes). Your first action should be to check one of the virus hoax Web sites listed at the end of this article. Or check with your department's Technology Support Coordinator (TSC). Do not respond to such a message by forwarding it to everyone you know! This action serves only to spread false alarm and misinformation. Make sure a virus alert is the real thing before passing it along to anyone.

How can you protect your computer from virus infection?

The following are some basic safety rules:

- Install and use a good virus-detection program on your computer. Most anti-virus software not only will check for viral infection on your computer and eliminate any detected viruses, but can also be configured to protect your machine by automatically checking any removable media (e.g., floppies, Zip disks, CD-ROMs) you insert into your machine. (The UCD campus has a site license for Dr. Solomon's Antivirus Toolkit; see Resources at the end of this article for more information.) Be advised that new viruses are discovered daily, and major commercial anti-virus software vendors provide updates frequently. Keeping your anti-virus software up to date will maximize your protection. Once you buy the software, most companies will let you download current updates from their Web sites at little or no cost.
- Unfortunately, some viruses cannot be eradicated with anti-virus software, and the infected files must be deleted. Here is yet another reason why making regular back-ups of your data is a wise precaution.
- Always scan disks or email attachments with anti-virus software before using them. Most anti-virus software can be set up to scan disks and files automatically. Err on the side of caution even when your best friend gives you some files on a floppy. When it comes to computer viruses, your best bet is to take the "X-Files" approach: "Trust no one."
- Keep an emergency startup diskette on hand in case your computer experiences extensive viral damage and you need to reboot your machine. This is a wise precaution in any event, as operating systems can occasionally become corrupted for other reasons.
- After using public computer facilities, always do a virus scan on any floppies or Zip disks you used at those facilities before using the files on your machine.
- If you do find a virus on your computer's hard drive, you should be sure to scan any removable media (floppies, etc.) that you used in that computer in the recent past.
- Run a virus check on your whole computer regularly, just in case anything has "slipped through." Some anti-virus programs can be configured to do this automatically.

Glossary

Virus: A malicious program designed to create copies of itself and attach these copies to other programs without the user's knowledge or permission. A virus may or may not have a "payload" — that is, cause deliberate damage to a computer system it has infected. However, no virus can be assumed harmless and all should be eradicated upon discovery.

Executable file: Basically a synonym for "computer program" — a file capable of executing or carrying out instructions to interact with the computer's operating system and affect other programs or files. In execution, the source code of the program is loaded into memory and the instructions are performed.

Macro language: A "macro" is a set of stored commands executed when a simple keystroke combination is pressed. Macros are helpful when you need to frequently perform the same sequence of commands. Computer programs (such as the Microsoft Office suite and Lotus Notes) that support macros use a macro language to "expand" or interpret the macro before the commands in the macro are executed.

Richard Darsie wrote this article, with contributions from the following IT staff members: Beau Patrette (IT Express), Jonathan Hwang (Center for Advanced Information Technology), Ann Mansker (Technology Support Program), and Robert Ralston (Computer and Printer Repair).

Resources

Virus Information Resources
Antiviral Toolkit Pro Virus Encyclopedia (updated daily)
   http://www.avpve.com/
Computer Virus Myths
   http://kumite.com/myths/myths/
Internet Hoaxes Web site
   http://ciac.llnl.gov/ciac/CIACHoaxes.html
Macintosh Virus Web page
   http://www.macvirus.com/
Macro Virus Information
   http://www.drsolomon.com/vircen/vanalyse/macvir.html
Symantec Antivirus Research Center
   http://www.symantec.com/avcenter/
Widespread Virus Myths (excellent source of information)
   http://www.stiller.com/myths.htm

UC Davis Anti-Virus Resources
Bovine Online (Internet software suite for UCD affiliates; includes Dr. Solomon's Antivirus Toolkit)
   http://online.ucdavis.edu/
UCD Site License Web site (download Dr. Solomon's Antivirus Toolkit here)
   http://eclipse.ucdavis.edu/slc/content/drsolavtk.html

Other Anti-Virus Software Resources
Dr. Solomon's Anti-Virus
   http://www.drsolomon.com/products/antivirus/index.cfm
Norton Anti-Virus
   http://www.symantec.com/nav/
Virex
   http://www.drsolomon.com/products/virex/index.cfm

Dr. Solomon's "Virus Central" Web site (http://www.drsolomon.com/vircen/) contains a wealth of information on computer viruses.

Data Center Prepares for Move
Scheduling Minimizes Service Interruptions

The Data Center's staff and computing systems will move from the basement of Hutchison to the former Repro Graphics building over several weekends in November and December. The Data Center houses 80 campus academic, administrative, and infrastructure systems, including email servers, the Banner Student Information System, and DaFIS. Over 25 staff members, including database administrators, systems administrators, and operations staff will move into the new Data Center during the same time period.

Service Interruptions Kept to a Minimum

The Data Center team is working very closely with client support groups and campus departments to ensure minimal disruption in service. The staff will work after hours and on weekends and holidays to minimize the impact of the move. However, most systems will be down for an average of 12 hours. (See the table for a listing of the major systems affected.) These interruptions are needed to perform complete back-ups and to physically move and reconfigure each system. A detailed relocation schedule is available on the Data Center Web site at *http://ir.ucdavis.edu/dc/move.html*.

Month of November

Infrastructure and administrative systems will be moved on weekends in November. Most of the infrastructure systems including those providing access to newsgroups (Usenet News server), Internet Relay Chat (IRC server), and electronic mailing lists, including class lists (Listproc), will move on Saturday, November 14.

The second phase, scheduled around the November 26-27 holiday, will focus on administrative computing systems (e.g., DaFIS and Banner). These systems should be available for campus use on Monday morning, No-

vember 30.

Month of December

The majority of academic systems, including email servers, will be moved between December 20 and 28. You will receive an email notification in early December if you are using one of the POP email servers. (If you check your email with a program like Eudora, your campus computer account has been assigned to one of the POP servers.) The message, called a POP Message of the Day (or POP MOTD) will specify the times when your email server will be unavailable. To find out which email server your computer account is assigned to, go to *http://ir.ucdavis.edu/info/email/*.

More Information

For updates, background information, and resources related to this move, see the Data Center Web site at *http://ir.ucdavis.edu/dc/*. The site includes a detailed list of move dates and downtimes for all systems. You may send comments and questions to *dc-move@ucdavis.edu*. To view systems announcements, including Messages of the Day, go to *http://ir.ucdavis.edu/info/*.

Major Campus Computer Systems	Approximate Downtimes	
	From	To
INFRASTRUCTURE SYSTEMS		
IRC server	11/14 (Sat.): 12:01 a.m.	11/14 (Sat.): 6:00 p.m.
Listproc	"	"
Usenet News server	"	"
Mothra server (Yen) [1]	11/26 (Thurs.): 12:01 a.m.	11/26 (Thurs.): 6:00 p.m.
ADMINISTRATIVE SYSTEMS		
DaFIS Decision Support	11/25 (Wed.): 7:00 p.m.	11/27 (Fri.): 5:00 p.m.
DaFIS Production Systems	11/26 (Thurs.): 12:01 a.m.	11/27 (Fri.): 5:00 p.m.
Banner/Student Information System	11/26 (Thurs.): 12:01 a.m.	11/28 (Sat.): 1:00 a.m.
RSVP-Touchtone Registration	"	"
ACADEMIC SYSTEMS		
Central UNIX Servers (isun [2])		
Central VMS Server (Euclid)	11/27 (Fri.): 12:01 a.m	11/27 (Fri.): 6:00 p.m.
Email Servers		
green (POP2)	12/20 (Sun.): 12:01 a.m.	12/20 (Sun.): 8:00 a.m.
blue (POP4)	12/24 (Thurs.): 12:01 a.m.	12/24 (Thurs.): 8:00 a.m.
mailbox (Sol)	12/25 (Fri.): 11:30 p.m.	12/26 (Sat.): 6:00 p.m.
scarlet (POP3)	12/28 (Mon.): 12:01 a.m.	12/28 (Mon.): 8:00 a.m.

1 Used primarily to change campus computer accounts, passwords, and ServiceIDs.

2 Used mostly to check email with a program like Pine. If you need to access one of the UNIX servers between 12/20 and 12/28, type in *isun* rather than the names of the specific UNIX servers (*boris, cathbert, dilbert,* or *dogbert*).

A Guide to Effective Online Searches
Increasing Your Chances of Finding What You're Really Looking For

BY JOE SCUDERI

Psst...want to be an information genius? Here's how: First, formulate a question. Next, find an Internet-connected computer with a Web browser. Enter keywords from your question in a Web search engine. Filter out the junk sites, and there you have it, your answer. You genius, you.

Is it really that easy? The answer is...sometimes. As Webmaster for the Internship and Career Center, I teach free workshops on finding jobs and other information using the Web. The biggest problems most students have with Web searches are brainstorming keywords and filtering results. This

article includes my favorite search engine tips that directly address those difficulties and increase the chances of obtaining relevant results. Although I've used specific examples, these tips extend to any search.

This summer, to supplement UCOOL, the popular official job database (*http://jobs.ucdavis.edu/*) designed to help UCD students and alumni find work, I reviewed many job sites (see *http://icc.ucdavis.edu/iccdocs/jobs.htm*). In my case, the search target was clear: **any free job listing Web sites**. How did I find them? By following four simple principles.

1. Use Multiple Engines: To find new

sites, I used three of the most popular Web search engines: Yahoo (*http://www.yahoo.com*), AltaVista (*http://www.altavista.digital.com*), and HotBot (*http://www.hotbot.com*). Each of these sites continuously indexes different Web pages so they will produce different results on any given day.

At their simplest, these Web sites offer boxes in which you enter keywords and buttons on which you click to initiate searches. My initial search for "jobs" returned the following number of references: Yahoo, 5,931; HotBot,

Network 21 Update

BY *WENDY PHILLIPS*

The Network 21 project is in its third and final stage. Department cutovers began on July 8, and by October 20, 135 departments were successfully connected to the campus's new ATM fiber optic network. Additionally, 8,419 of the 10,369 campus Network Access Models (NAMs) in the Network 21 project have been cut over to the new system. The remaining 38 departments are expected to be connected by Thanksgiving, approximately one month ahead of schedule.

Project Goals and What to Expect After Cutover

The objective of the Network 21 project is to build a highly stable, standardized Asynchronous Transfer Mode (ATM) network infrastructure for the UC Davis campus. This robust, fiber optic communications system is designed to enhance the flexibility of network management on the department level, increase reliability, and improve network service through the replacement of the legacy campus network backbone and the implementation of Virtual Local Area Networks (VLANs).

The differences users will experience in network access after cutover may be subtle, but these changes are important to the growth and vitality of the campus network.

Most users will notice increased system performance at the desktop, as data is now served by a dedicated, port-to-port 10Mb switch. This method of data transfer is faster and more efficient than the legacy network infrastructure, which uses shared network hubs. Additionally, moving to a dedicated switch system prepares the way for future advances in system performance.

The Network 21 project provides improvements only up to the wall jack, however. In practical terms, some users may not experience augmented performance because their computers are limited by preexisting wall-to-desktop network connections, hardware, or software.

Converting from LANs to VLANs

Users of legacy Local Area Networks (LANs) will be converted to VLANs (Virtual LANs) as their departments are cut over. Establishing VLANs allows computers in the same department to be connected to one another even if they are located in different buildings. VLANs should simplify system maintenance and translate into less downtime for users. Legacy LANs required that each site be maintained separately. (For a more detailed discussion of VLANs, please see *http://net21.ucdavis.edu/newvlan.htm*.) In most cases, converting a computer to the new VLAN system involves nothing more than minor changes to network settings. Support for the LAN to VLAN conversion is included as part of the Network 21 cutover plan. As with LANs, ongoing support for departmental VLANs will be the responsibility of department network administrators.

Network 21 Cutover Progress Report

(as of 10/28/98)

	Total Number	Cutover Complete	To Be Cut Over	Percentage of Total
NAMs	10,369	8,419	1,950	81.2%
VLANs	232	180	52	77.6%
Departments	173	135	38	78.0%

Help Before and After Cutover

If you have questions prior to your department's scheduled cutover date, please contact the Cutover Coordination Project Manager, Rick Hinton, at (530) 752-7419.

After cutover, questions and problems should be directed to the Network 21 Helpdesk at (530) 754-NW21 or *net21helpdesk@ucdavis.edu*. Service is provided the same day whenever possible.

For more details on the Network 21 project, please see *http://net21.ucdavis.edu/*.

Wendy Phillips is Senior Writer with Information Technology's Communications Resources.

The cover of the new campus directory was designed by Todd Zerger of Creative Communication Services.

1998-99 Campus Directory Published

Copies of the 1998-99 UC Davis Campus Directory are being distributed free of charge to campus departments. The directory, published by Communications Resources' Directory Services unit, includes listings for departments and individuals located on campus and at the UC Davis Medical Center in Sacramento. The Whois/Nickname Lookup Service found on the Web at *http://www.ucdavis.edu/cgi-bin/whois/* provides information included in the directory. If you are a campus telephone subscriber and have not yet received your copy of the directory, you can request one by calling (530) 752-8972. Additional copies may be purchased through Central Stores or the UCD/UCDMC Bookstore.

You are encouraged to submit updates to this year's directory as soon as changes occur. The information will be automatically made available to the campus operators, who rely on the directory database in their daily activities. The update form is on page 10 of the directory and on the Web at *http://cr.ucdavis.edu* (choose item #3, "Online Ordering and Forms"). Simply complete the form, send it by campus mail to Directory Services, fax it to (530) 752-9777, or click on the "Submit" button on the Web page.

BITS & BYTES

IT Administrative Review Town Hall

Mark your calendar! On November 19, the Division of Information Technology Administrative Unit Review Committee will conduct a Town Hall meeting to help address the Committee's charge to "...assess...the suite of services and support activities provided to the campus, and the extent to which these activities are meeting campus expectations." All members of the campus community are invited to participate in the Town Hall, which is scheduled as follows:

Date: November 19, 1998
Time: 3:30-5 p.m.
Location: 1022 Life Sciences Addition.
(Refreshments will be provided.)

The discussion will focus on these four questions:

1. What are your goals (and/or your constituency's goals) related to the use of technology?
2. What services and programs do you (and/or your constituency) rely on the IT organization to provide?
3. Keeping in mind the Committee's charge to assess IT's *suite of services, support activities, and communications,*
   a. What does the IT organization do well?
   b. Where could the IT organization improve?
4. What suggestions do you have for improving IT services, programs, and communications?

In addition to this Town Hall, the Committee will be conducting a series of meetings with key IT constituent and client groups from October 27 through November 20.

If you are unable to attend the Town Hall and wish to participate in the Administrative Review Committee's work, submit your comments and suggestions to:

- Dave Shelby, Chair of the Review Committee: *drshelby@ucdavis.edu* or (530) 752-3478.
- The Review Committee Staff: *itreview@ucdavis.edu*.

For further information on the Committee, its charge, the review process, the schedule of consultations with IT clients, and avenues for feedback, please visit the Information Technology Five-Year Administrative Review Web site at *http://it.ucdavis.edu/adminrev*.
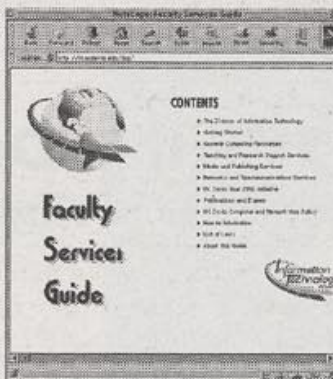
The 1998-99 Faculty Services Guide is Online!

The Information Technology Faculty Services Guide includes information and detailed instructions on services and resources related to using technology in teaching and research. The guide offers step-by-step instructions on a number of topics, including how to open a computing account, create electronic mailing lists, download class rosters from the Registrar's Web site, incorporate technology into the curriculum, and access the Library's electronic reserves. Structured by service, the guide provides descriptions and contact information for technology, media, and publishing support resources available on campus. The Web version, which will be updated quarterly, can be accessed at *http://it.ucdavis.edu/fsg/*. To obtain a hard copy, email *itpubs@ucdavis.edu* or call (530) 752-5965.

Recent Campus Software Site License Acquisitions

BY LEIGH ANN GILES

New MacOS 8.5 Agreement

The University of California Office of the President (UCOP) has recently renewed the Apple System Software agreement, which includes the just-released Mac Operating System version 8.5. Apple has changed the agreement from a site license to a volume purchase agreement. This means that the agreement is based on specific CPU count. Departments, staff, and faculty will need to purchase licenses and CDs for home or office use through the UCD Bookstore Computer Shop or IT Computer and Printer Repair. Unfortunately, Apple has decided to exclude students from this agreement. The new agreement does not affect any previous MacOS versions: MacOS 8.0 and 8.1 are still available to the entire campus and can be downloaded from *ftp://itexpress.ucdavis.edu/*. The Computer Shop is also selling a shrinkwrap version of MacOS 8.5 to all university affiliates (including students) for $65. We are still waiting for the "official" MacOS 8.5 CD. The CDs and licenses should be available by mid-November. Pricing for the new MacOS includes two years of upgrades (through August 2000).

License, CD, and upgrades:	$29.99
License and upgrades:	$24.99

You can also purchase the licenses only, at a lower price, if you have more than one computer.

StatView 5.0 is Available

StatView is a statistical/data analysis software package that incorporates an easy-to-use graphical interface. It is used in UC Davis statistics classes and can be found in campus computer labs. It is also available for download from the site licenses Web site at *http://eclipse.ucdavis.edu/slc/content/statv.html*.

For a complete listing of StatView 5.0's new features, look at *http://www.statview.com/productinfo/v5/SV5feat.html*.

There is currently no charge for StatView 5.0, but the software will cease to function in December 1998. Please check the link listed above for instructions on how to obtain a new version of StatView in late December. The StatView product line has recently been purchased by SAS Institute, Inc.

Timbucktu Volume License Agreement

Recently UCOP and vendor Netopia ratified a volume license agreement for Timbucktu products. Timbucktu is remote control and file transfer software. Typically used by remote workers and computer help desk staff, Timbucktu facilitates collaboration on projects and shared documents, and coordination of schedules. For more product information, visit Netopia's Web site at *http://www.netopia.com/software/tb2/*.

The new agreement will provide reduced pricing on new purchases and upgrades. Licenses, media, and documentation will be available to departments from Wareforce (800-777-9309 ext. 5502).

Wareforce pricing for Timbuktu:

Timbuktu License	$15.00
Version Upgrade	$ 7.50
Competitive Upgrade	$11.25
CD-ROM	$ 9.00
Getting Started Guide	$ 9.00

Wareforce's price lists are on the Web at:
*http://www.wareforce.com/wareforce/clients/ucop.htm*
http://www.wareforce.com/wareforce/clients/uc_timbu.html

Leigh Ann Giles, the site license coordinator, can be reached at (530) 752-5413 or itslc@ucdavis.edu. The Site License Web site can be found at http://slc.ucdavis.edu/.

New Photo CD Service Offers Flexibility

High quality scanning and Photo CD services are now available to UC Davis faculty, staff, and students on a recharge basis. Simply send in your 35mm slides or negatives and Creative Communication Services' Illustration Services will scan them using a professional Kodak® film scanner and place them on the medium of your choice. This service will prove particularly helpful if you need to produce a number of high quality scans and create large archives of digital images. In the past, original slide collections had to be taken directly to an outside vendor or duplicated so they could be digitized off campus. With the new service, one-of-a-kind collections can remain on campus throughout the digital conversion process, thus reducing overall costs. Specific features include:

- High-resolution images can be produced from any digital photographic or graphic source, including 35mm slides, negatives, CDs, or Zip disks.
- You may choose to save images in any format, including TIFF, JPEG, or Image Pak. With Kodak's Image Pak, you can place 100 images on a single CD in five different resolutions, from 70K thumbnails to 2048x3072 pixel 18MB files.
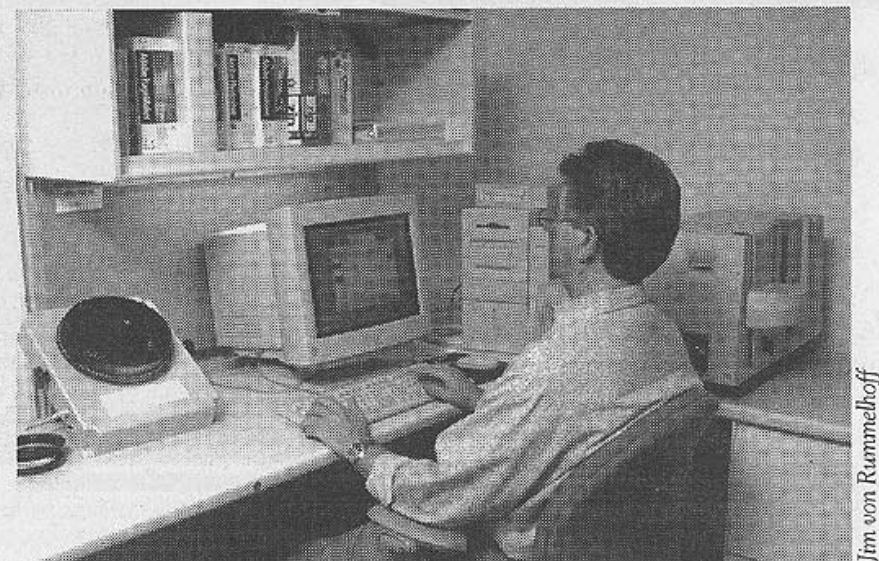
Eldon Tanner of Creative Communication Services demonstrates the new Photo CD Film Scanner.

- Image files can be saved on any medium, including CD, Zip disks, Jaz disks, 128MB opticals, and Kodak Writable and Portfolio II CDs. Scanned images may also be stored on the Illustration Services file server. (You will have up to a week to retrieve the images.)
- Each Photo CD comes with software that makes it easy to view and print your images. You can also run one-click slide shows of your collections.

For more information on this service and prices, please contact Creative Communication Services' Illustration Services at (530) 752-2133.

DaFIS MATTERS
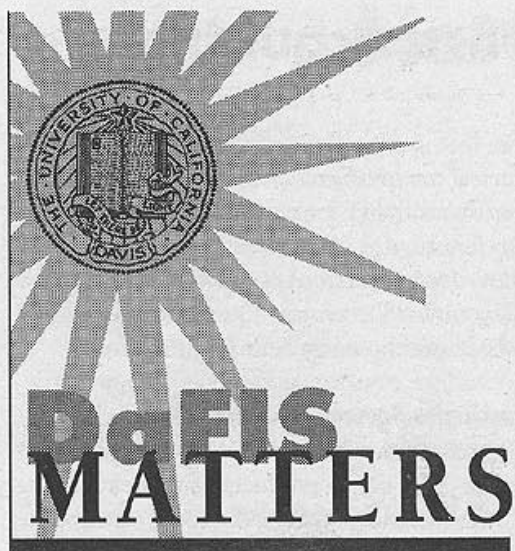
The Path to System Enhancements

BY LIA SCOTT

DaFIS, the Davis Financial Information System, is well into its second year, and we have already released several software upgrades. Many changes were directly requested by users. Generally speaking, critical and non-critical system enhancements follow a process driven by user needs and input.

Identifying a Need

Possible changes to the system (Transaction Processing or Decision Support) are initiated in one of these main ways:

- A member of the the Functional Users Group reports a problem or need directly related to the individual's job function, or identified through campus feedback mechanisms.
- The Customer Advisory Team (CAT) receives input from users in the division or school that they represent and defines a change request.
- The DaFIS Help Desk identifies a need based on calls received from staff.

Once the need for an enhancement or bug fix has been identified, it is entered into the Change Request System database, which allows the requests to be tracked and prioritized.

If a bug or enhancement is identified as a critical emergency (for data integrity, system performance, or a critical business function), it is assigned to a developer. After extensive testing, the change is released into Production as soon as is practical.

All non-critical bugs and enhancements go through a much more comprehensive evaluation.

The Review

The Customer Advisory Team and the Functional Users Group review all of the outstanding change requests. These two groups are charged with prioritizing the requests based on :

- The greatest overall impact on users
- The importance of the change for conducting the university's business
- Whether it fills a need not previously met.

The committees also determine an estimate of the "value" of a change — in terms of time, labor and/or cost savings. Once they have completed this process, each committee submits its prioritized list to the DaFIS Steering Committee for review. The Steering Committee reviews the lists and creates a combined list of prioritized enhancements.

The DaFIS project manager and development manager are given this combined list for evaluation. Based on this list and available resources, they determine the scope of the next release. This truncated list is presented to the Steering Committee, along with the preliminary schedule, for review and final acceptance.

User Input is Critical

To date, enhancements to DaFIS have all come from some form of user input. Examples of enhancements driven by user feedback include:

- **Commodity Code searches**. The search screen was improved based on user surveys and communication with Purchasing.
- **Changes during routing**. This functionality was identified by the CAT as a high priority based on user input.
- **Transaction Listing with Payroll Detail**. Through extensive interviews with users, the DaFIS Assessment Task Force identified this recent enhancement as users' highest priority. This report was conceived and designed to meet the specific needs of Principal Investigators.

It is only through the collaborative efforts of campus and Accounting & Financial Services staff (including the DaFIS Team) that DaFIS can succeed. Without this collaboration, the system could not continue to improve.

To determine who is your CAT representative, visit the DaFIS Web site, *http://accounting.ucdavis.edu/DaFIS/*. The CAT page contains a list of all committee members, by school or division, and the members of the subcommittees.

*Lia Scott, from Accounting and Financial Services, can be contacted by email at liascott@ucdavis.edu.*

ERGONOMICALLY SPEAKING
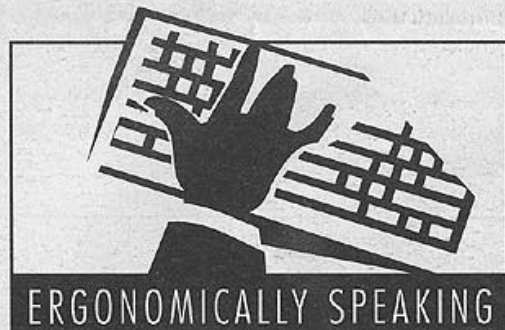
BY JANET FORD, PT, MS

Computer User's Alert: Don't Neglect Office Safety

"Office Safety Evaluation," a new Web-based safety training tool for office and computer users, can be accessed at the UCD Environmental Health & Safety (EH&S) Web site *http://ehs.ucdavis.edu/ergback*. "Office Safety Evaluation" highlights key issues and provides resource information pertinent to the office environment.

Top Three Office Safety Issues:

- **Back Safety**

  Are you and your colleagues practicing safe lifting? Do you know how to safely lift your computer monitor? Your printer? Safe lifting includes knowing limitations, getting help if an item is too heavy, lifting with the legs instead of the back, keeping items close and avoiding twisting when lifting and lowering.
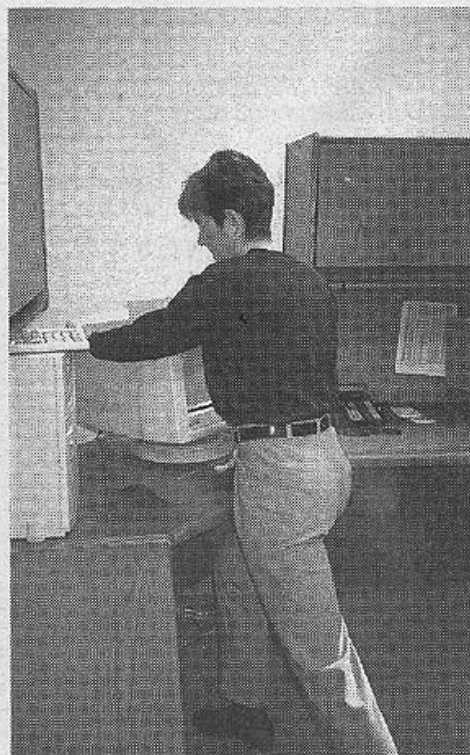
Janet Ford demonstrates the proper position for lifting a computer monitor.

Aviva Luria

- **Preventing Slips, Trips, and Falls**

  With the multitude of computer, printer, electrical, and phone connections required in most offices today, wires and cords have become a prime trip hazard. Wires and cords should never be stretched across an aisle or under carpeting. Under the desk, cords should be organized to reduce chances of catching a loose cord on your foot and tripping.

- **Office Ergonomics**

  "Office Safety Evaluation" points to a new Web-based safety training tool entitled "Computer Workstation Evaluation: Location, Fit, and Use," which will be highlighted in the next issue of the *IT Times*.

Additional Office Safety Issues:

- **File Cabinet Safety**

  File cabinets that are not secured to the wall can tip when heavy top drawers are opened, especially if weight is not evenly distributed among drawers. This potentially could lead to dangerous situations and loss of equipment.

- **Fire and Electrical Safety**

  Did you know it is unsafe to plug one power strip into another, because it exceeds the design capacity of the power strip and could be a fire hazard? Likewise, it is unsafe to plug a power strip into an extension cord. Use extension cords only for temporary power.

- **Chemical Safety**

  Are you properly handling and storing office chemicals such as laser printer toner cartridges? Store toner cartridges in the boxes they came in, and place them back in their bags and boxes after use. Some brands can be returned to the manufacturer for recycling. Read the instructions on the box.

- **Safety Training**

  Periodic office safety training is recommended to heighten employees' safety awareness. Environmental Health and Safety offers a multitude of training materials, including Safety Nets, videos, and Web-based information. For a listing of training materials, go to *http://ehs.ucdavis.edu/ergback*.

For more information on any safety-related issue, contact your EH&S Safety Advisor or EH&S at (530) 752-1493.

Send questions about ergonomics to ergonomics@ucdavis.edu. All correspondence will be kept confidential.
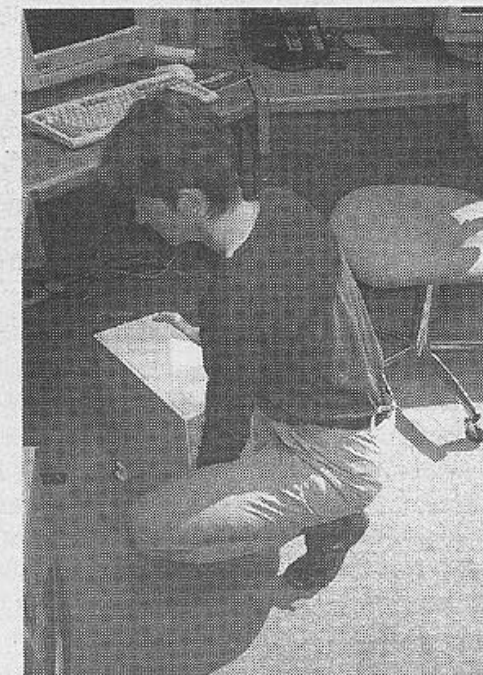
When lifting equipment from the floor, use your legs, not your back.

Aviva Luria

M.U. Station

other campus classrooms, have brought the total number of available workstations to 335, and reduced the students-to-computers ratio to 154.2:1.

Student surveys conducted by Information Resources Lab Management in the winter quarters of 1997 and 1998 revealed that opening an open-access computer room, in addition to the one at TB 114, was the "most important way to improve overall computer access" (see graph on page 1). Surveyed students also voted for more computers and more open use time as improvements they'd most like to see in computer classrooms, and over-

The M.U. Station has been in high demand since it opened in early October.

Jim von Rummelhoff

whelmingly supported the core campus as the prime location for a new room. According to Reed, ASUCD representatives hear from their peers that increased access to computers is a top priority.

"Students don't have the time to wait for hours to get on a computer," says Reed. The classes that share time at most of the other computer rooms on campus make it difficult for students to get their work done, he says. "This lab is for students. We've put it in a location that's accessible for them. We want them to be able to use it."

Student Affairs, MU Auxiliary Services, CURB (Campus Unions and Recreation Board), and Information Technology were in agreement about the need for increased stu-

dent access to computers. The Station is the product of their ongoing collaborative efforts to find and secure space and funding for more campus computer rooms.

"Students are more and more dependent on connectivity both for email and for downloading information for their classes. They come to us with very sophisticated technology skills and we haven't been able to meet that need in the past," says Kate Scott, director of design services for Student Affairs and the Memorial Union. The Station was designed as a place where students could surf the Net and complete their assignments, she says. "The idea behind the space was that we would not construct this area as if it were a learning lab or a teaching lab. It is meant to have much freer access. We thought the M.U. was a perfect place for that."

According to Reed, ASUCD jumped at what was a rare opportunity "to get this kind of real estate and this kind of commitment from other entities on campus. In under a year we've already had a product out. On a university campus that is amazing."

The M.U. dedicated space by moving a conference room and jointly funding, with ASUCD, improvements to the space. IT provided the equipment, set up, and ongoing maintenance and support.

"This is part of an ongoing effort," says Blando. "There are plans for more computer rooms." The Visualization Lab recently moved into temporary classrooms west of Academic Surge, freeing up 301B Surge IV for a future classroom or general access lab. And two small

| Percentage of Undergraduate Students with Campus Computer Accounts (as of 11/2/98)	
Class Level	% of Total
Freshman	91%
Sophomore	98%
Junior	96%
Senior	99%

rooms in Olson basement will be combined to create another large classroom.

The popularity of The Station shows the project to be a success: Statistics compiled by Lab Management indicate that since mid-October, The Station has often reached capacity or near-capacity on weekdays between 9 a.m. and 6 p.m. Usage of the other open-access room, TB 114, which has been open since Fall 1997, hits maximum or near-maximum on weekdays between 9 a.m. and 5 p.m.

"The Station by itself cannot solve all our access problems, but it certainly is making a big difference for many students," says Blando. "It shows that when we all work together for a common goal, we really can get things done."

Resources

Lab Management's Web site (*http://lm.ucdavis.edu/*) includes results and analyses of student surveys referenced in this article and information on campus computer rooms' equipment, hours, and availability.
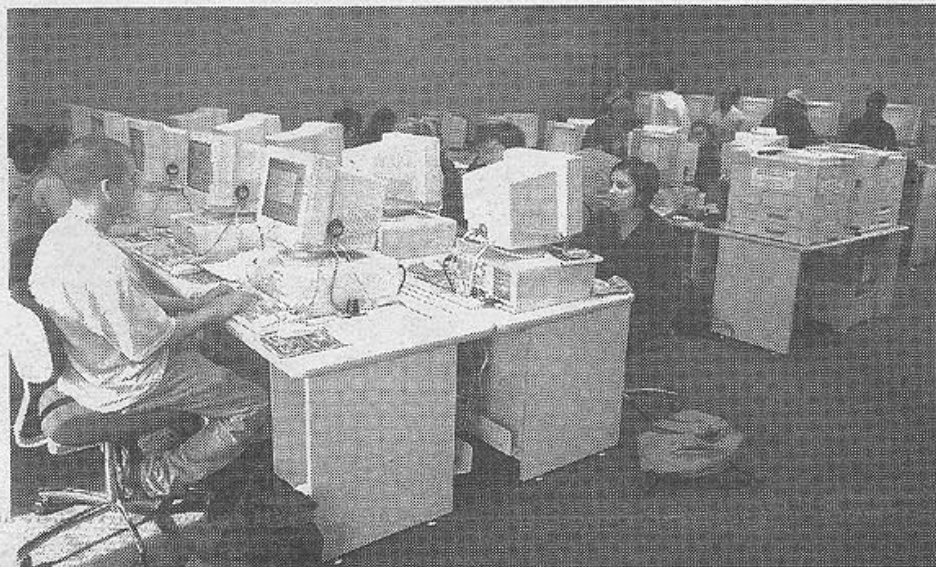
Searches

1,042,691; and AltaVista, 5,735,720 sites. It is important to realize what these numbers mean. They merely indicate that the word "jobs" appears somewhere on nearly 6 million of the 140+ million Web sites cataloged by AltaVista. It does not mean there are that many job-related sites. For example, a poetry page professing "jobs are but running mice ..." may be included in the listings above.

Here are three more tricks I use to **increase** search results:

2. Capitalization: An AltaVista search for the word "Xenophilia" (97 hits) is not the same as a search for "xenophilia" (156 hits). Lowercase keywords on AltaVista find **all** cases while uppercase limits your search to the case specified. In other words, a search of the keyword "music" will return all uppercase and lowercase variations of the word ("Music," "music," and "MUSIC"), but capitalizing the word ("Music") will limit the search to that specific spelling. If you need more hits, vary your capitalization. The rules do differ from search engine to search engine, so read each search site's help files!

3. Check Word Forms: Entering "aggie" in AltaVista returns 88,230 sites, while "aggies" yields 31,660. Need more hits? Vary

the tense, gender, and plurality of your keywords. If you find far fewer sites than you expected, double-check your spelling!

4. Let the Engines Brainstorm: The search results for "job sites" in AltaVista gave me several other ideas for keywords. For example, I hadn't initially tried "staffing" or "human resources." This type of exploration can greatly increase your options, but beware of distractions! "Staffing" may be another word for the rare art of stick fighting using hollow logs, for example. Fascinating reading, but stay on task, Robin Hood.

It has been said that there is more raw information on the Web than exists in print in all the libraries of the world. Therefore, the odds are quite good that you will be flooded with irrelevant sites. As a remedy, here are some hints for **narrowing** your search:

1. Find Phrases. Put quotes around phrases, especially phrases that include common words (e.g., "art bell"). This will narrow your search by requiring that sites contain your phrase verbatim. In general, the longer your quoted phrase, the fewer the results. For example, a search on "job listing web sites" returned only 13 relevant matches.

2. Omit Words! One useful way to narrow your search is to exclude words or phrases by using the minus symbol (–). By entering *"job listings" –computer,*

my results dropped by over 23,000 hits.

3. Understand Results. Again, the last example does **not** include all non-computer related job listings! It simply displays all Web sites cataloged that include the phrase "job listings" without the word "computer." This result may still have many computer-related jobs. Why? This could happen because the word "PC" was used instead of computer, or because the search engine did not index the entire Web page.

Remember that your search skills will improve with practice. Always ask, "What unique words or phrases might appear on a page with the information I seek?" This is a subtly different question than "What information do I seek?" Most searchers make the mistake of assuming the engines answer the latter question. The distinction between the words on a page and the content of a page may at first be difficult to comprehend, but making efficient and precise use of Web searches can make your research more productive.
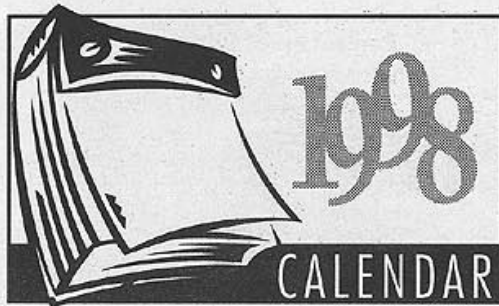
Joe Scuderi is Webmaster for the Internship and Career Center (ICC). He co-teaches a workshop sponsored by ICC entitled "Look Smart: Finding Jobs on the Web." (See Calendar on page 8 for schedule.) He can be reached at jmscuderi@ucdavis.edu or (530) 752-6654.

1998 CALENDAR

http://it.ucdavis.edu/calendar/

November

10 ◆ Filemaker Pro: Reports: 8:30-11:30 a.m., TB 134.

☆ Homework Distribution: Email Attachments Made Easy: 3:30-4:30 p.m., 174 AOB IV.

11 ◆ Fundamentals of Photoshop: 9 a.m. - 4 p.m., TB 134.

☆ Homework Distribution: Email Attachments Made Easy: 10-11 a.m., 174 AOB IV.

❏ Formatting Bibliographies for Research Papers: 11-11:50 a.m., Microcomputer Room, 163 Shields Library.

◆ Fundamentals of Access: 1:30-4:30 p.m., TB 135.

❏ Using the Library, Part 2: 2:10-3 p.m., Microcomputer Room, 163 Shields Library.

12 Look Smart: Finding Jobs/Information on the Web (Internship & Career Center), 1-2 p.m., 21 Olson.

◆ Fundamentals of Windows 95: 1:30-5 p.m., TB 135.

☆ Arbor Special Presentation: "Evaluation and Testing" of teaching and learning. Third in a series of discussions on teaching, learning, and technology. Prof. Dick Walters moderates. 3-5 p.m., 174 AOB IV.

13 Visualization Facility Open House: 11 a.m.- 1 p.m. (See shaded box below.)

16 ❏ Using the Library, Part 1: 11-11:50 a.m., Microcomputer Room, 163 Shields Library.

17 ❏ Using the Library, Part 1: 1:10-2 p.m., Microcomputer Room, 163 Shields Library.

☆ Homework Distribution: An Overview of Options, Traditional to Electronic: 3:30-4:30 p.m., 174 AOB IV.

18 ☆ Homework Distribution: An Overview of Options, Traditional to Electronic: 10-11 a.m., 174 AOB IV.

❏ Web Searching Basics: 3:10-4 p.m., Microcomputer Room, 163 Shields Library.

19 Town Hall, conducted by the IT Five-Year Administrative Review Committee: 3:30 - 5:00 p.m., 1022 Life Sciences Addition. (See page 4 for details.)

❏ Formatting Bibliographies for Research Papers: 11-11:50 a.m., Microcomputer Room, 163 Shields Library.

Distributed Authentication Service Description and Overview: 10-11 a.m. (See Campus Presentations below.)

23 ◆ Fundamentals of Netscape: 8:30-11:30 a.m., TB 134.

◆ Designing an Access Database: 9 a.m. - 4 p.m., TB 135.

✤ Web Publishing: Tables: 1:30 - 4:30 p.m., TB 134.

24 ◆ Fundamentals of Excel: 8:30 a.m. - 12:00 p.m., TB 134.

❏ Using the Library, Part 1: 11-11:50 a.m., Microcomputer Room, 163 Shields Library.

◆ PageMaker: Newsletters: 1:30-4:30 p.m., TB 134.

☆ Homework Distribution: Homework Delivery Methods II: 3:30-4:30 p.m., 174 AOB IV.

25 ☆ Homework Distribution: Homework Delivery Methods I: 10-11 a.m., 174 AOB IV.

30 Look Smart: Finding Jobs/Information on the Web (Internship & Career Center): Noon - 1 p.m., 27 Olson.

❏ Formatting Bibliographies for Research Papers: 3:10-4 p.m., Microcomputer Room, 163 Shields Library.

December

1 ◆ Excel: Functions: 1:30-4:30 p.m., TB 134

◆ Windows 95: Beyond the Fundamentals: 1:30-4:30 p.m., TB 135

☆ Home(page) Wasn't Built in a Day...: An Overview of Options: 3:30-4:30 p.m., 174 AOB IV.

2 ❏ Using the Library, Part 1: 10-10:50 a.m., Microcomputer Room, 163 Shields Library.

☆ Home(page) Wasn't Built in a Day...: An Overview of Options: 10-11 a.m., 174 AOB IV.

◆ Access: Macros: 1:30-4:30 p.m., TB 135.

Distributed Authentication Service Description and Overview: 10-11 a.m. (See Campus Presentations below.)

3 ◆ Word: Mail Merge: 1:30 - 3:30 p.m., TB 134.

◆ Fundamentals of Windows 95: 1:30 - 5 p.m., TB 135.

☆ Arbor Special Presentation: "Technology Applied to Learning." Fourth in a series of discussions on teaching, learning, and technology. Prof. Dick Walters moderates. 3-5 p.m., 174 AOB IV.

❏ Formatting Bibliographies for Research Papers: 3:10-4 p.m., Microcomputer Room, 163 Shields Library.

8 ❏ Using the Library, Part 1: 3:10-4 p.m., Microcomputer Room, 163 Shields Library.

☆ Home(page) Wasn't Built in a Day...: Dreamweaver and Pagemill Demo: 3:30-4:30 p.m., 174 AOB IV.

Key to Classes & Seminars

✤ Information Provider Series: Staff Development & Professional Services. Faculty and student registration: *learnit@ucdavis.edu* or 754-8091.

❏ Library Instruction Programs: *LibraryClass@ucdavis.edu* or 752-4381.

◆ Staff Development & Professional Services (SD&PS): Enroll online at *http://sdps.ucdavis.edu.* Call 752-1766 for an application or catalog.

☆ Arbor Presentations: Arbor Faculty Technology Center, 174 AOB 4; call 754-2115 or email *arbor@ucdavis.edu.*
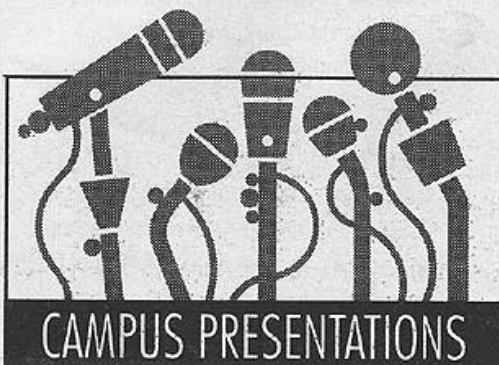
CAMPUS PRESENTATIONS

Webmasters: Are you looking for an easy way to limit access to your Web site? Are you tired of keeping yet another list of names and passwords for access to your restricted Web pages? Would you like your off-campus users to be able to access a Web site that you would prefer to restrict to the *ucdavis.edu* domain? Are you interested in limiting access to a Web site by class membership? You can do all these things and more using the Distributed Authentication Service. This service is useful to Webmasters who want to control or limit access to their Web sites (or other internet-based services).

How do I learn more about controlling access to my Web site?

Doreen Meyer from IT's Distributed Computing Analysis and Support (DCAS) and Faust Gorham from the Center for Advanced Information Technology (CAIT) have planned three presentations. In addition, you can make an appointment with the CAIT staff and view the CAIT's demonstration system, a PC running Netscape, IIS, Cold Fusion, the Distributed Authentication Service, and Windows NT. You can visit the Distributed Authentication Web page at *http://dcas.ucdavis.edu/access/distauth.*

Distributed Authentication Service Description and Overview

Date: Thursday, November 19, 1998
Time: 10:00-11:00 a.m.
Location: Arbor, 174 AOB IV
Audience: Faculty

Distributed Authentication Service Description and Overview

Date: Wednesday, December 2, 1998
Time: 11:00 a.m. - 12:00 noon
Location: CAIT, 165 Shields Library
Audience: Webmasters and Web content providers

For more information on any of these presentations, contact Doreen Meyer at (530) 754-7742 or *dimeyer@ucdavis.edu.*

Visualization Classroom and Lab Open House

The Visualization Facility, in Temporary Classrooms 1 and 2, located West of Academic Surge and north of Meyer Hall, will hold an Open House on **Friday, November 13**, from 11 a.m. to 1 p.m. The Visualization Classroom and Lab provide scientific computing services, including:

- Geographic Information Systems (GIS)
- Molecular visualization and modeling
- Symbolic mathematics
- Remote sensing
- Scientific visualization.

Visit ANSA's Web site at *http://ansa.ucdavis.edu/* for more information.