Although the Wharton School has traditionally provided its students with access to a rich array of electronic communications software, many students used only a fraction of these tools. Wharton MBA student Laurie Bloomgarden points out that “Many students didn’t realize what resources were available, or they simply found them too difficult or frustrating to use.” Laurie and several other students in the Wharton Graduate Association (WGA) were determined to do something about it.

Last spring this group developed a proposal for a richer communications environment—one they wanted for themselves and for their fellow students. Their goal was to make all of Wharton’s computing systems “more accessible and user friendly” for students. They wanted a system that was:

• Easy to use, with a graphical Windows-based front end.

• Presented within a single, integrated interface that arranged services based on their functionality for students, not on their underlying technology or administrative organization.

• Available everywhere—from home, from Wharton’s labs, or “on-the-fly” from students’ laptop systems.

The students presented this proposal to School administrators and Wharton Computing and Information Technology (WCIT).

Alternatives considered

The students and WCIT evaluated alternatives, including outsourcing the project to a commercial information service provider or using a groupware tool like Lotus Notes to build a customized service. But each of these approaches had drawbacks.

While an online service such as AOL or CompuServe would be easy to use, there were concerns about the lack of focus on the specific needs of Wharton students and on the commitment to a

(continued on page 16)
ON THE COVER: SPIKE, the new, student communications environment at Wharton, has added eight beautifully designed button icons to Penn's virtual landscape.

Penn Printout Online contains the electronic version of Penn Printout and includes archives dating back to September 1991.


Printed on acid-free, recycled paper. Please recycle this issue.
accessing the Penn Web
(http://www.upenn.edu/)

There are several ways to access the Penn Web, depending on the software you are using and/or the type of network connection you have. The most popular Web access methods are summarized below.

For a graphical view

A graphical view of the Penn Web requires graphical browsing software, a high-speed network connection, and a relatively powerful computer (see “More on Netscape,” below). Netscape 1.1N is the supported browser at Penn. Other free graphical browsers, such as Mosaic, work much like Netscape, but offer fewer or different features, resulting in less attractive screen layouts or inability to access some popular features, such as the Penn Library’s interactive, online forms. Non-graphical browsers such as Lynx have additional limitations (e.g., no sound, video, or images).

• Via Netscape (Macintosh or Windows) Web browser:
  Type http://www.upenn.edu/ under “Open Location...” in the Netscape File menu.

For a non-graphical view

A non-graphical view of the Penn Web requires no special browsing software on your desktop; a browser named Lynx is available on the remote system you connect to. If you already use the network for accessing e-mail, the Library’s online catalog, or other networked resources at Penn, you should be able to use one or more of the methods below without additional hardware or software.

• Via the PennNet annex prompt: Type t www.upenn.edu at the annex prompt.
• Via desktop Telnet software, e.g., MicroPhone Pro 2.x, Host Presenter (Windows), NCSA Telnet (Mac): Use www.upenn.edu as the host address.
• Via a University e-mail host: Enter lynx at the main menu on many systems. Dolphin, pobox, mail.sas, and eniac.seas are among the mail hosts that make Lynx available.

More on Netscape

Helper Applications for Netscape:

Helper applications enhance Netscape’s functionality. The following helper applications are supported at Penn:
• Sound Machine 2.1 (Mac) for sound
• Sparkle 2.1 (Mac) and MPEG Player 1.5 (Win) for video
• Acrobat Reader 2.01 for viewing electronic documents in PDF format, with original fonts, graphics, and layout

Basic hardware/software requirements for Netscape:
• Macintosh (030 minimum, 040 or PowerMac recommended) or Windows PC (386 minimum, 486 or Pentium recommended)
  Note: Windows95 is not supported on campus at this time.

Additional requirements–campus offices or ResNet rooms:
• Ethernet card or adapter
• Ethernet connection and TCP/IP software

Additional requirements–off-campus dial-up locations:
• TCP/IP and MacSLIP/PPP or PPP for Windows software, together with a Network ID and password
• High-speed modem (9.6 Kbps minimum, 14.4 Kbps or higher recommended)
  Dial-up phone numbers are 215/898-0834 (up to 14.4 Kbps), 215/573-4777 (28.8 Kbps, PPP only), and 610/444-5593 (up to 14.4 Kbps).

Where to get Netscape:
• On disk: Netscape is included with MacSLIP/PPP for Macintosh and PPP for Windows, distributed at the CRC, 3732 Locust Walk.
• DCCS AppleShare server: Netscape (Mac) and the Mac helper applications are in the “Netscape” folder; Acrobat Reader is in the “acrobat_reader” folder.
• FTP server: Netscape and Acrobat Reader are in their own subdirectories in the /mac and /pc directories.

Netscape training:

One-hour Bits and Pieces seminars; call ISC Technology Learning Services at 573-3102 or check the calendar section for dates.

Netscape documentation:

Tip sheets on Netscape for Macintosh and Windows are available at the CRC and at http://www.upenn.edu/isc/document.html.

Assistance and information

Consult your School or office support provider, ISC First Call (573-4778), the CRC (3732 Locust Walk), or the 1995-96 PennNet Passport ($5 at the Book Store).
From the specialized to the general, interest groups sponsored by Information Systems and Computing bring together people from across campus. You’re welcome to join any of these groups:

**ANTIVIRAL SPECIAL INTEREST GROUP**

**Purpose**
Stay current on virus threats and response strategies, for both Macintoshes and IBM compatibles

**Members**
Computing support providers, campus-wide; a subgroup of the Super User Group

**Meetings**
All communication is electronic

**Contact**
Caroline Ferguson (caroline@isc.upenn.edu; 215/898-9090)

**DESKTOP PUBLISHING INTEREST GROUP**

**Purpose**
Help new desktop publishers get oriented; share information and resources; explore ideas and techniques

**Members**
Students, faculty, and staff doing electronic design and publishing

**Group Mailing list**
dtp@isc.upenn.edu

**Meetings**
Usually third Tuesday of the month, 12-1

**Contact**
Randall Couch (couch@isc.upenn.edu; 215/898-6243)

**INTERACTIVE TECHNOLOGIES GROUP**

**Purpose**
Do collaborative problem-solving; share information and resources

**Members**
Students, faculty, and staff using or developing interactive technologies

**Group mailing list**
itg@isc.upenn.edu

**News group**
upenn.interactive_technologies

**Meetings**
Last Wednesday of the month, 12-1:30; rotate school sites

**Contact**
John MacDermott (macderm@isc.upenn.edu; 215/898-3046) or Donna Milici (donna@isc.upenn.edu; 215/898-0426)

**LAB ADMINISTRATORS SPECIAL INTEREST GROUP**

**Purpose**
Explore lab roles in supporting instructional computing; share information and resources

**Members**
Computer lab administrators, campus-wide; subgroup of the Super User Group

**Group mailing list**
lab-sig@isc.upenn.edu

**Meetings**
As needed

**Contact**
Donna Milici (donna@isc.upenn.edu; 215/898-0426)
MACNET (MACINTOSH NETWORKING) TEAM

Purpose
Provide peer support for Macintosh-related network software and hardware; advise ISC on networking products; assess multiplatform interoperability solutions

Members
University personnel supporting the Macintosh in a network environment

Meetings
Second Thursday of the month, 2-3:30

Group mailing list
macnet@dccs.upenn.edu

Contact
Tony Olejnik (tony@isc.upenn.edu; 215/898-9408)

PCNET (PC NETWORKING) TEAM

Purpose
Provide peer support for PC-related network software and hardware; advise ISC on networking products; assess multiplatform interoperability solutions

Members
University personnel supporting PCs in a network environment

Meetings
Third Thursday of the month, 2-3:30

Group mailing list
pcnet@dccs.upenn.edu

Contact
Tony Olejnik (tony@isc.upenn.edu; 215/898-9408)

PENN WEB PROVIDERS OF INFORMATION SPECIAL INTEREST GROUP

Purpose
Information, training, and support for Web providers

Members
People responsible for departmental information posted in the Penn Web

Group Mailing list
web-poi@isc.upenn.edu

Meetings
As needed

Contact
Christopher Hiester (hiester@isc.upenn.edu; 215/898-2262)

SMALL SCHOOLS GROUP

Purpose
Share information and resources; lobby and advise ISC

Members
Computing support providers in the smaller schools

Group mailing list
smallschools-tf@dccs.upenn.edu

Meetings
Third Tuesday of the month, 1-2

Contact
Linda May (may@isc.upenn.edu; 215/898-0005)

SUPER USER GROUP

Purpose
Share information and resources; sponsor vendor presentations; discuss support issues such as site licensing and technology tracking

Members
Computing support providers, campus-wide

Group mailing list
sug@isc.upenn.edu

News group
upenn.super-users

Meetings
Second Monday of the month, 12-1:30; 285 McNeil

Contact
Donna Milici (donna@isc.upenn.edu; 215/898-0426)

UNIX USERS GROUP

Purpose
Share high-level UNIX information and resources

Members
UNIX system administrators and expert users, campus-wide

Group mailing list
uugg@isc.upenn.edu

Meeting
Most communication is electronic

Contact
Donna Milici (milici@isc.upenn.edu; 215/898-0426)

PATRICIA ADAMS is Staff Assistant for the Office of the Vice Provost, Information Systems and Computing.
To help you use computing and networking services at Penn, Information Systems and Computing (ISC) and other University computing support offices have developed a variety of publications and how-to documents. Some key publications and documents, together with distribution information, are described below. Online versions of most documents can be accessed from the ISC’s document page on the Penn Web (http://www.upenn.edu/isc/document.html).

A note about online access and formats:
Some documents can be read directly online using any Web browser; others are in PDF format and require Acrobat Reader software and a graphical Web browser. Acrobat Reader can be downloaded from the /mac and /pc directories on the server ftp.upenn.edu or from the DCCS AppleShare server. Users of Netscape and other graphical Web browsers can configure their browser to launch Acrobat automatically when they select a PDF file on the Internet.
The Penn environment

Computing at Penn
A one-page color brochure designed to orient you in Penn’s dispersed computing environment. It lists phone numbers and e-mail addresses for School and ISC computing and networking support services, includes a list of campus computer labs, points you to additional information on support and training, e-mail services, software sales and distribution, and more. Availability. Book Store literature racks near checkout counter, Computing Resource Center (CRC) at 3732 Locust Walk, and Van Pelt Reference. In early fall the brochure was sent via intramural mail to faculty and full-time staff and to most graduate students with departmental mailboxes.

PennNet Passport
A guide to networking at Penn and beyond, describing connection options; hardware and software requirements; how to connect via modem; network services such as e-mail, NetNews, and World Wide Web; and Internet navigation tools such as Netscape. Availability. Spiral-bound version—$5 at the Book Store. Online.

Penn Printout
The University’s computing magazine, covering a broad range of computing and networking topics relevant to the Penn community. It appears six times annually—October, November, December, February, March, and April. Availability. Individually labeled copies sent to all Penn faculty and full-time staff via intramural mail. Bundles distributed to libraries, computer labs, Computer Connection, dormitory and other building lobbies, and many other sites. Online.

Antiviral software

Macintosh

DOS/Windows
About Vi-Spy: Anti-virus software for IBM/Compatible Microcomputers. Overview of Vi-Spy virus detection software.

Vi-Spy: Installing from DS-DD disks. Vi-Spy (v. 12.0) First Time Installation Guide. Availability. All online. Printed versions of the two installation documents also available at the CRC.

Communications software

General
PennNet settings. Communications software settings for PennNet access. Availability. Online.

Macintosh
About MicroPhone: Communications Software for the Macintosh. Overview of MicroPhone communications software. MicroPhone: Configuring for Use with PennNet. Installing and configuring MicroPhone for dial-in access to PennNet. PPP for Macintosh: Getting Started. Installing and configuring PPP for high-speed dial-in access to PennNet. Availability. All online. Printed versions of PPP and configuring MicroPhone documents also available at the CRC.

DOS/Windows

Electronic mail

General
How to Get an E-mail Account at Penn. A list of where to get e-mail accounts and e-mail help. Availability. Online.

(continued on next page)
Elm users

*Elm reference cards.* Reference cards covering the following topics: getting started/addressing/security, using the Pico editor, list of Elm commands, working with folders, working with aliases, and sending and receiving MIME attachments.

**Availability.** Online (requires Adobe Acrobat). Printed copies distributed by Schools and ISC to their respective Elm account holders.

*Guide to Elm at Penn.* A manual providing basic information on preparing, sending, and reading messages. Also covers useful features such as organizing mail, creating aliases, looking up addresses in the Whois e-mail directory, and uploading and downloading attachments.

**Availability.** Online. Printed copies sold at low cost by Wharton Reprographics, 400 SH-DH, and distributed free of charge by some Schools and by ISC to their respective Elm account holders.

Eudora users

*Eudora (Mac) reference cards.* How to configure and use Eudora.

*Eudora (Windows) reference cards.* How to configure and use Eudora.

**Availability.** Both online (requires Adobe Acrobat). Printed versions distributed by some Schools to e-mail account holders.

Eudora users

*Eudora (Mac) reference cards.* How to configure and use Eudora.

*Eudora (Windows) reference cards.* How to configure and use Eudora.

**Availability.** Both online (requires Adobe Acrobat). Printed versions distributed by some Schools to e-mail account holders.

Tin reference card. Basic instructions for using the Tin newsreader installed on many University e-mail host computers.

**Availability.** Online (requires Adobe Acrobat). Printed copies distributed by Schools and ISC to Elm account holders.

*NewsWatcher (Mac).* Tip sheet for getting started with NewsWatcher.

**Availability.** Online.

*Trumpet for Windows.* Tip sheet for getting started with Trumpet.

**Availability.** Online.

File transfer

*Fetch (Mac).* Tip sheet for getting started with Fetch.

*MicroPhone (Mac): Downloading Library Records.* Downloading records from the Franklin online catalog.

*WS-FTP (Windows).* Tip sheet for getting started with WS-FTP.

*MicroPhone (Windows): Downloading Library Records.* Downloading records from Franklin online catalog.

**Availability.** All online.

WWW navigation

*Netscape (Mac).* Tip sheet for getting started with Netscape.

*Netscape (Windows).* Tip sheet for getting started with Netscape.

**Configuring Netscape (Mac) for Acrobat Reader.**

**Configuring Netscape (Windows) for Acrobat Reader.**

**Availability.** All online.

Telnet to host computers

*MicroPhone (Mac): Using the Telnet Tool.* Installing and using the Telnet Tool.

*NCAS Telnet (Mac).* Tip sheet for getting started with NCSA Telnet.

*LWP Host Presenter (Windows).* Tip sheet for getting started with Host Presenter.

**Availability.** All online.

EDDA KATZ is Director of the ISC Communications Group.

Penn Printout wins ACM award.
The computer labs on this list are open to faculty, staff, and students with a current Penn ID. The listing was compiled from information provided by the many different campus offices that manage the labs. It may change as those offices modify lab hours and reconfigure equipment. All labs have PennNet connections. An asterisk next to the lab name designates Ethernet capability. Note that the list continues on the following two pages.

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<th>LAB</th>
<th>HOURS</th>
<th>COMPUTERS</th>
<th>PERIPHERALS</th>
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</thead>
<tbody>
<tr>
<td>Bodine Computer Lab *</td>
<td>TBA</td>
<td>3 IBM compatible (486)</td>
<td>1 laser (PC), 1 dot-matrix (PC)</td>
</tr>
<tr>
<td>3rd floor lounge, Room 322</td>
<td></td>
<td>6 Mac (2 PowerMac 6100)</td>
<td>1 laser (Mac), 1 DeskWriter (Mac)</td>
</tr>
<tr>
<td>The Quad, 3700 Spruce Street</td>
<td></td>
<td>w/DOS card), 2 Centris 650</td>
<td>2 dot-matrix (Mac)</td>
</tr>
<tr>
<td>573-4474</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butcher-Speakman/Class of 28*</td>
<td>TBA</td>
<td>2 IBM compatible (486)</td>
<td>1 laser (PC), 1 dot-matrix (PC)</td>
</tr>
<tr>
<td>Basement, Room 142</td>
<td></td>
<td>7 Mac (3 PowerMac 6100)</td>
<td>1 laser (Mac), 1 DeskWriter (Mac)</td>
</tr>
<tr>
<td>The Quad, 3700 Spruce Street</td>
<td></td>
<td>w/DOS card), 2 Centris 650</td>
<td>2 dot-matrix (Mac)</td>
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<tr>
<td>898-6399</td>
<td></td>
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<tr>
<td>Class of 1937 Computer Lab*</td>
<td>Same as</td>
<td>8 IBM PS/2 55sx</td>
<td>2 DeskJet (PC)</td>
</tr>
<tr>
<td>5th floor, Van Pelt-Dietrich Library</td>
<td>Van Pelt</td>
<td>12 Mac IIci</td>
<td>3 DeskWriter (Mac)</td>
</tr>
<tr>
<td>Center 3420 Walnut Street, 573-2846</td>
<td>Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community House Lab*</td>
<td>8 am-2 am Su-T</td>
<td>2 IBM compatible (486)</td>
<td>1 laser (PC), 1 dot-matrix (PC)</td>
</tr>
<tr>
<td>Room 105, Ash Hurst</td>
<td>10 am-2 am W,Th</td>
<td>8 Mac (3 PowerMac 6100)</td>
<td>1 laser (Mac), 2 dot-matrix (Mac)</td>
</tr>
<tr>
<td>The Quad, 3700 Spruce Street</td>
<td>9 am-9 pm F</td>
<td>w/DOS card), 4 Centris 650</td>
<td></td>
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<tr>
<td>573-3382</td>
<td>10 am-9 pm S</td>
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</tr>
<tr>
<td>Graduate Data Analysis Lab*</td>
<td>24 hours</td>
<td>8 IBM compatible (486DX)</td>
<td>1 laser</td>
</tr>
<tr>
<td>Rooms 303 &amp; 398, McNeil</td>
<td></td>
<td>3 Pentium</td>
<td>10 dot-matrix</td>
</tr>
<tr>
<td>3718 Locust Walk, 898-6454</td>
<td></td>
<td>8 X-Station</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>5 IBM 6000</td>
<td></td>
</tr>
<tr>
<td>Graduate Education Lab</td>
<td>9 am-9 pm M-Th</td>
<td>3 IBM compatible (386)</td>
<td>2 dot-matrix (PC)</td>
</tr>
<tr>
<td>Room A-36</td>
<td>9 am-5 pm F</td>
<td>3 Mac Ilci, 1 Centris 610</td>
<td>1 laser (PC/Mac)</td>
</tr>
<tr>
<td>3700 Walnut Street, 898-1847</td>
<td></td>
<td>2 Centris 650, 1 PowerMac</td>
<td>5 dot-matrix (Mac)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 scanner (Mac)</td>
</tr>
<tr>
<td>Graduate School of Fine Arts*</td>
<td>9 am-midn’t M-Th</td>
<td>8 Pentium</td>
<td>4 Color InkJet</td>
</tr>
<tr>
<td>Room 320-326, Meyerson Hall</td>
<td>9 am-6 pm F</td>
<td>13 IBM compatible (486)</td>
<td>2 HP PaintJet</td>
</tr>
<tr>
<td>210 South 34th Street</td>
<td>noon-6 pm S</td>
<td>11 IBM compatible (386)</td>
<td>6 DeskJet 500</td>
</tr>
<tr>
<td>898-9344</td>
<td>noon-midnight Su</td>
<td>8 PowerMac</td>
<td>3 HP Pen Plotters</td>
</tr>
<tr>
<td>LAB</td>
<td>HOURS</td>
<td>COMPUTERS</td>
<td>PERIPHERALS</td>
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<tr>
<td>Grad Tower A*</td>
<td>noon-3 am Su-Th noon-midnight F,S</td>
<td>2 IBM compatible (486) 9 Mac (3 PowerMac 6100 w/DOS card), 1 Centris 650</td>
<td>1 laser (PC), 1 dot-matrix (PC) 1 scanner (Mac), 1 laser (Mac) 1 DeskWriter (Mac) 2 dot-matrix (Mac)</td>
</tr>
<tr>
<td>Basement</td>
<td>3600 Chestnut Street 573-3535</td>
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<tr>
<td></td>
<td>Specially equipped for individuals with disabilities</td>
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<td></td>
</tr>
<tr>
<td>Harrison House*</td>
<td>6 am-4 am M-Su 6 IBM compatible (468) 11 Mac (3 PowerMac 6100 w/DOS card), 7 Centris 650</td>
<td>1 laser (PC), 2 DeskJet (PC) 1 dot-matrix (PC) 1 laser (Mac), 2 dot-matrix (Mac)</td>
<td></td>
</tr>
<tr>
<td>Upper lobby, High Rise South</td>
<td>3901 Spruce Street, 898-3457</td>
<td></td>
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</tr>
<tr>
<td>Hill House*</td>
<td>noon-2 am Su-Th noon-8 pm F 10 am-8 pm S 6 IBM compatible (486) 7 Mac (3 PowerMac 6100 w/DOS card), 3 Centris 650</td>
<td>1 laser (PC), 3 dot-matrix (PC) 1 laser (Mac), 1 Deskwriter (Mac) 3 dot-matrix (Mac)</td>
<td></td>
</tr>
<tr>
<td>1st floor</td>
<td>3333 Walnut Street 898-9343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Project*</td>
<td>TBA 2 IBM compatible (486) 2 Mac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room 1901, High Rise East</td>
<td>3820 Locust Walk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kings Court/English House*</td>
<td>noon-2 am M,W 10-2 am T,Th,Su 10 am-8 pm F,S 5 IBM compatible (486) 8 Mac (4 PowerMac 6100 w/DOS card), 1 Quadra 650</td>
<td>1 laser (PC), 1 dot-matrix (PC) 1 laser (Mac), 1 DeskWriter (Mac) 2 dot-matrix (Mac)</td>
<td></td>
</tr>
<tr>
<td>3465 Sansom Street 898-2845</td>
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</tr>
<tr>
<td>Language Lab (MMETS DRL)*</td>
<td>9 am-9 pm M-Th 9 am-4:30 pm F 4 pm-8 pm Su 3 IBM PS/2 20 Mac SE/30</td>
<td>laser printing</td>
<td></td>
</tr>
<tr>
<td>Computer Classroom Basement, DRL 33rd and Walnut, 898-4947</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M62 Lab*</td>
<td>24 hours 25 IBM PC</td>
<td></td>
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<tr>
<td>Towne Building 220 South 33rd Street</td>
<td></td>
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</tr>
<tr>
<td>Medical School Micro Center*</td>
<td>Same as Biomedical Library 7 IBM compatible (486) (1 486 print station) 20 PowerMac 6100/66 (1 Mac IIcx print station)</td>
<td>1 laser (PC), 6 dot-matrix (PC) 1 laser (Mac)</td>
<td></td>
</tr>
<tr>
<td>1st floor, Biomedical Library Johnson Pavilion 37th and Hamilton Walk 898-9249</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Modern Languages House*</td>
<td>TBA 4 IBM compatible (486) 5 Mac, 3 Centris 650</td>
<td>1 laser (PC), 1 dot-matrix (PC) 1 laser (Mac), 1 dot-matrix (Mac)</td>
<td></td>
</tr>
<tr>
<td>Rooms 13 &amp; 14, College House 3940 Locust Walk, 898-2845</td>
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<td></td>
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</tr>
<tr>
<td>Provost Tower Computer Lab*</td>
<td>TBA 8 IBM compatible (486) 8 Mac (3 PowerMac 6100 w/DOS card), 4 Centris 650</td>
<td>1 laser (PC), 4 dot-matrix (PC) 1 laser (Mac), 12 dot-matrix (Mac)</td>
<td></td>
</tr>
<tr>
<td>3rd floor</td>
<td>The Quad, 3700 Spruce Street 898-9809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rosengarten Computer Lab*</td>
<td>Same as Rosengarten Reserve Room 10 IBM PS/2 55sx 20 Mac IIcx</td>
<td>1 laser (PC), 7 dot-matrix (PC) 2 laser (Mac), 12 dot-matrix (Mac)</td>
<td></td>
</tr>
<tr>
<td>Van Pelt-Dietrich Library Ctr. 3420 Walnut Street, 573-2846</td>
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</tbody>
</table>

10
<table>
<thead>
<tr>
<th>LAB</th>
<th>HOURS</th>
<th>COMPUTERS</th>
<th>PERIPHERALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAS DOS Micro Lab*</td>
<td>Same as building hours</td>
<td>14 IBM compatible (486)</td>
<td>laser printing</td>
</tr>
<tr>
<td>Room 4N16, DRL 33rd and Walnut, 898-4947</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAS Macintosh Micro Lab*</td>
<td>Same as building hours</td>
<td>8 Mac II</td>
<td>laser printing</td>
</tr>
<tr>
<td>Room 2N40, DRL 33rd and Walnut, 898-4947</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School of Nursing Micro Ctr.*</td>
<td>9 am-8 pm M-Th 9 pm-5 pm F 10 am-4 pm S</td>
<td>15 IBM compatible 15 Macintosh</td>
<td>2 laser (PC), 6 dot-matrix (PC) 2 laser (Mac), 1 dot-matrix (Mac)</td>
</tr>
<tr>
<td>Room 210, Nursing Ed. Bldg., 420 Guardian Drive, 898-1616</td>
<td></td>
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<tr>
<td>Stouffer Lab*</td>
<td>TBA</td>
<td>3 IBM compatible (486) 5 Mac (1 PowerMac 6100 w/DOS card), 3 Centris 650</td>
<td>1 laser (PC), 1 dot-matrix (PC) 1 laser (Mac), 1 dot-matrix (Mac)</td>
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<tr>
<td>Room 171F, Stouffer Triangle 3702 Spruce Street</td>
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<tr>
<td>Towne Library Mac Lab*</td>
<td>Same as Towne Library</td>
<td>9 Mac IIsi 2 PowerMac 6100/66</td>
<td>1 laser, 2 dot-matrix</td>
</tr>
<tr>
<td>Room 217, Towne Bldg., 220 South 33rd Street 898-7266</td>
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<tr>
<td>Undergrad Data Analysis Lab</td>
<td>9 am-9 pm M-Su 11 IBM compatible (486) 12 Pentium 10 Mac IIsi</td>
<td>2 laser (PC), 24 dot-matrix (PC) 1 laser (Mac)</td>
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<tr>
<td>Rooms 104, 108-9 McNeil 3718 Locust Walk, 898-9123</td>
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<tr>
<td>Van Pelt College House*</td>
<td>24 hours</td>
<td>3 IBM compatible (486) 6 Mac (1 PowerMac 6100 w/DOS card), 3 Centris 650</td>
<td>1 laser (PC), 1 DeskJet (PC) 1 dot-matrix (PC) 1 laser (Mac), 1 DeskWriter (Mac) 2 dot-matrix (Mac)</td>
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<tr>
<td>Room 123 3909 Spruce Street 417-5069</td>
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<tr>
<td>Ware College House*</td>
<td>7-midnight M-F 3 IBM compatible (486) 5 Mac (1 PowerMac 6100 w/DOS card)</td>
<td>1 laser (PC), 1 dot-matrix (PC) 1 laser (Mac), 2 dot-matrix (Mac)</td>
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<td>1st floor The Quad, 3700 Spruce</td>
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<tr>
<td>WEB DuBois College House*</td>
<td>noon-2 am M-F noon-midn’t S,Su</td>
<td>6 IBM compatible (486) 8 Mac (2 PowerMac 6100 w/DOS card), 5 Centris 650</td>
<td>1 laser (PC), 1 dot-matrix (PC) 1 laser (Mac), 1 dot-matrix (Mac)</td>
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<tr>
<td>Room 131 3900 Walnut Street, 898-4014</td>
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<tr>
<td>Wharton DOS/Windows Training Lab,* Room 116 SH-DH 3620 Locust Walk, 898-8600</td>
<td>24 hours</td>
<td>40 Pentium</td>
<td>20 dot-matrix</td>
</tr>
<tr>
<td>Wharton General Computing Lab, Room 114, SH-DH 3620 Locust Walk, 898-8600</td>
<td>24 hours</td>
<td>20 Pentium</td>
<td>2 laser (PC), 10 dot-matrix (PC)</td>
</tr>
<tr>
<td>Writing Lab*</td>
<td>10 am-5 pm M-F 1 Mac SE/30, 9 Mac IIsi 1 Mac SE</td>
<td>1 laser, 2 dot-matrix</td>
<td></td>
</tr>
<tr>
<td>Room 413, Bennett Hall 3340 Walnut Street, 898-8525</td>
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NOVEMBER 1995
Have you ever wondered why the Library’s catalog and all the various databases the Library offers can’t be searched with the same commands and through the same interface? Have you wondered why Franklin and Current Contents have one look and feel, which is different from the OVID search system for MEDLINE and CINAHL, which is different from Anthropological Literature, and so on?

Most current Penn Library electronic services are terminal/host (vt100) systems. A terminal/host system requires a “dumb” terminal that essentially is just a remote screen for the central “host” computer. The dumb terminal can be a dedicated terminal located in the Library, or a personal computer using terminal emulation software. Files and data are stored on the host, and the user at the dumb terminal can only send keystrokes and view data. The terminal interface itself does not have the intelligence (computing power) to do any sophisticated processing of the information sent by the host.

Future Library electronic services will be oriented to an architecture called “client/server,” and often to a “flavor” known as “Z39.50 client/server.”

**What is client/server?**

Client/server is a software architecture that divides an application into two pieces: the client, or interface; and the server, or search engine and data “warehouse.” The client/server architecture distributes computing processing around networks, and maximizes the processing power of multiple-platform client workstations: only the data that users need is sent, and at workstations, whether they are DOS/Windows, Macintosh, or UNIX, users have control over the processing and presentation of the information. Consequently, many organizations, libraries included, are implementing client/server architecture because they believe it will lower computing costs, improve productivity, increase data security, and allow better presentation of data (such as image display). The Eudora e-mail program and the Netscape Web browser are examples of client/server systems in use at Penn.

**What is Z39.50?**

Z39.50 is a communications protocol that supports searching and retrieval of information in a distributed network environment. Z39.50 makes large information databases easier to use by establishing uniform standards so different systems can communicate with one another in a way that is transparent to users. The protocol makes it possible for a user in one system to search and retrieve information from other computer systems (that have also implemented Z39.50) without having to know the search syntax used by those other systems.

The utility of Z39.50 is not limited to bibliographic data: the protocol is general and can work with other types of data, such as images. And the protocol is being used by communities other than the library community: for example, the Government Information Locator Service (GILS) and WAIS (Wide-Area Information Server) are cousins of Z39.50. Moreover, the utility of the protocol is being extended by Web-to-Z39.50 gateways, so Web browsers can also be clients of Z39.50 servers.

**Z39.50 at Penn’s Library**

The current OVID MEDLINE/CINAHL search system is a terminal/host system. (MEDLINE and CINAHL are citation databases for medicine and nursing, respectively, and OVID is a search system developed by Ovid Technologies, Inc.) However, the Library is testing new, Z39.50-compliant client/server OVID software. In the new OVID implementation, the “client” will be the user’s workstation and the application software installed on it. Because the client is intelligent, it can communicate with the Library’s OVID server, pass database queries and other requests to it, receive data from it, and present it in a Windows-compatible interface (a Macintosh client and a Web product are under development, and an X-Windows product may also be developed).

But since the new OVID client/server software is extended by the Z39.50 protocol, users will get more than just a graphical interface. Not only can the OVID client communicate with the Library’s OVID server, the client can simultaneously act as a front end to OVID servers that are not located on campus (for example, those maintained by Ovid Technologies itself).

The Library also has an ongoing project to select a replacement for the current library catalog; the new system should be client/server and, ideally, Z39.50 compliant.
The new catalog client will have an interface and search commands distinct from the OVID client interface and search commands. However, under Z39.50, the OVID client could also be a user’s front end to the Library catalog server (if the latter is Z39.50 compliant). One could use the OVID interface and search commands to search the Library catalog, and search results would be displayed in the OVID format (although perhaps not as well as the Library catalog client would display them). Similarly, in the reverse direction, the Library client could search the OVID server, and MEDLINE and CINAHL search results could be displayed in whatever manner catalog records are displayed (although not perhaps with all the capability as through the native OVID client).

Moreover, Z39.50 will make it possible for the Library catalog system to interact with the OVID system so journal holding information from the catalog is reflected in the OVID system. This is why Z39.50 is important: it promises to permit a single user interface—or multiple user interfaces—to access a burgeoning number of electronic information resources.

To summarize the benefits of OVID Z39.50:

- It provides a graphical, point-and-click, Windows-compliant OVID interface. (As the Library acquires full-text OVID databases, the client will make it possible to view graphical text, images, tables, charts, etc., instead of just the plain text now viewable through the vt100 product.)

- It provides “hooks-to-holdings,” (when the Library selects a new library system that is Z39.50 compliant) which lets you know if the Library has a copy of citations found in the search system.

- As a Z39.50-compliant client, the OVID software will be able to search and display information from Z39.50-compliant servers, whether or not the server system is developed by Ovid Technologies.

The Library anticipates that a Z39.50-compliant Windows client will be available for wide distribution soon, and later, clients for Macintosh and X-Windows, as well as a Web product. For details and status, refer to the OVID System News screens when logging in to MEDLINE or CINAHL, or to “All About OVID” on the Health Sciences Libraries Web Home Page (http://www.library.upenn.edu/biomed/).

For more information about Z39.50

The Library of Congress is the official maintenance agency for Z39.50. Its Z39.50 Web pages (http://lcweb.loc.gov/z3950/agency/) contain official information and documentation related to the development and maintenance of the standard, including the official, 160-page text of ANSI/NISO Z39.50-1995 in pdf and ASCII formats, as well as articles and papers about the standard and a hyperlinked bibliography. Links to many Z39.50 servers are provided from http://lcweb.loc.gov/z3950/.

A Z39.50 Implementors’ Group (ZIG) drives the evolution of the standard; to subscribe to ZIG’s listserv (Z3950IWT), send the message “subscribe z3950iw” to listserv@nervm.nrdc.ufl.edu.

“Z39.50 Resources: A Pointer Page” is an excellent starting point, with a thorough, hyperlinked bibliography (http://www.research.att.com/~wald/z3950.html).

Many examples of Z39.50 library applications are accessible from the Web via gateways at (http://is.rice.edu/~riddle/webZ39.50.html).

WILLIAM GARRITY is Associate Director for Information Services, the Biomedical Library. Send questions and comments to garrity@pobox.upenn.edu.

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The primary goal of the University’s site license program is to make hardware and software available at the lowest possible cost by negotiating site license and volume purchase agreements with vendors.

Begun as an ad hoc effort in the mid-1980’s, the program has evolved into a coordinated service, managed by Information Systems and Computing (ISC), which has negotiated over thirty vendor agreements covering hundreds of products. The site license program saves the University several hundred thousand dollars each year. As shown in the accompanying list, the site license products currently available range from general productivity tools to special-function software. Beyond the addition of new platforms, modules, and products, there are several recent advancements worthy of note:

- In cases where software must be distributed on diskette, most products are now available from a central location on campus, the Computing Resource Center at 3732 Locust Walk.

- An electronic mail address, ssl@isc.upenn.edu, can be used to request order forms, ask questions about the availability of products, or provide feedback about the site license program.

**Steering committee**

Since 1993 the site license program has been governed by a steering committee, involving both ISC and School representatives. The group meets once a month to address global issues of needs assessment, negotiation, management, distribution, and marketing. The committee helps ensure that ISC effort and resources are devoted to negotiating and managing license agreements that make the most sense for Penn.

**Product evaluation groups**

The committee often receives requests to pursue licenses for competing products. Sometimes the need for multiple products in the same category is warranted, if, for example, products vary in functionality or compatibility. However, to garner sufficient volume or limit support costs, it may be necessary to select only one product in a category for volume licensing. Ad hoc product evaluation teams are mobilized to furnish recommendations to the committee. These evaluation groups are composed of users and support staff with expertise in targeted areas (e.g., statistics, utilities, or communications), who test and evaluate comparable products from competing vendors and recommend the most appropriate.
### CURRENT AGREEMENTS

University of Pennsylvania volume purchase agreements and site licenses are briefly noted below with telephone contact information; e-mail inquiries should be addressed to ssl@isc.upenn.edu. Please watch for our new Web site to come online soon, as a resource for acquiring current product information, pricing, and order forms. *Note:* the list below includes products for which site licenses and purchase discounts have been negotiated but does not necessarily imply ISC recommendation or full support.

#### Scientific Visualization
- IDL for Mac/Windows/DOS/Workstations (898-9090)

#### Security/Virus Protection
- Disinfectant for Mac, public domain (898-9090)
- FolderBolt for Mac (898-9090)
- IronClad for DOS/Windows (898-9090)
- Vi-Spy for DOS/Windows (898-9090)

#### Statistical
- SAS for DOS/Windows/OS/2 (898-9090)
- SAS for Workstations (898-9090)
- S-PLUS for Workstations (898-9090)
- SPSS for Mac/Windows/DOS, optional Professional/Advanced modules (898-9090)
- SYSTAT Mac/Windows/DOS (Wharton Reprographics, 898-7685)

#### Interactive/Publishing
- Adobe Acrobat Reader for Mac/Windows (898-1786)
- Macromedia Authorware for Mac (898-9090)
- Macromedia Director for Mac/Windows (898-9090)
- Macromedia SoundEdit Pro (898-9090)

#### Networking/Communications
- MacSLIP/PPP (898-9090)
- MacTCP (898-9090)
- MicroPhone for Mac/Windows (Computer Connection, 898-3282)
- Novell Products (currently under contract negotiation; call 898-9408)
- OSF Motif for Workstations (898-9090)
- ProComm for DOS (898-9090)
- PPP for Windows (898-9090)

#### Database
- Oracle (see your School/Center senior business officer for details)

#### Mathematics
- Maple for Mac/DOS/Windows/workstations (898-9090)
- Mathematica Mac/DOS/Windows/workstations (currently under contract renewal; call 898-0426 for status)

#### Making requests

The steering committee developed a form to be used when requesting products for consideration for a site license or a volume discount. The request form is available in hard-copy, via fax, or electronically. The requester must justify the need for a volume discount or site license for products for which there is a fairly universal need (beyond an individual School or department). The requests help the committee prioritize products to be pursued as well as maintain an overall picture of campus needs and academic initiatives. Request forms are available at the Computing Resource Center, by calling 898-9090, or sending e-mail to ssl@isc.upenn.edu.

### Strategic site license fund

An annual pool of funds has been earmarked, through internal reallocation of ISC budgets, to support the full or partial subsidization of strategic agreements and licenses in order to minimize their cost to the end user and to promote their penetration on campus. The steering committee developed the following criteria to guide them in the allocation of strategic

(continued on next page)
proprietary technology. Lotus Notes provides a strong set of tools for developing collaborative applications, but Notes did not fit well into an environment where students switch between using computers at home and in public-access labs. Notes also uses a proprietary architecture.

The solution preferred by the WGA advisory group and WCIT was to select “best of breed” Internet communications tools combined with a customized interface and special services geared to the needs of Wharton students.

Enter: SPIKE

With only eight weeks to develop the project before MBA students arrived for pre-term classes in August, WCIT was on a tight schedule. As Brett Hay, lead developer on the project, states “If you’re developing software for the consumer marketplace—like, say, Microsoft—you can slip your delivery schedule. We didn’t have that luxury. The incoming MBA class was arriving the first week in August. The product had to be ready.”

The project involved three major components: selecting the set of client tools, developing the customized interface, and building server-based applications to provide specialized services.

And the project needed a name. It was dubbed SPIKE. Why SPIKE? The official explanation is that SPIKE stands for “Student’s Personal Integrated Knowledge Environment,” although students and staff who have used Elm—the text-based e-mail program used at Penn—often prefer the acronym “SPIKE Probably Is (K)not Elm.” Insiders, however, know SPIKE was merely an arbitrary “code name” for the project. It didn’t mean anything. But the name stuck, and spawned several creative acronyms after the fact.

The project was completed on time and, on August 8, WCIT held its computer fair and distributed the first 625 copies of SPIKE to the incoming MBA class.

What does SPIKE do?

SPIKE’s main screen displays eight buttons for SPIKE’s primary functions:

- E-Mail: WCIT selected Siren Mail from Siren Software because of its functionality, graphical interface, and—most significantly—support for the IMAP protocol. One of the strengths of a host-based e-mail system like Elm is location independence—users can read and manage mail from any location with a consistent, command-line interface. Graphical mail clients that support the Post Office Protocol (POP), such as Eudora, provide a simple point-and-click interface, but typically manage mail locally by pulling all messages down to the

**BONNIE GIBSON** is Director of Finance and Administration for ISC; **DONNA MILICI** is Director of Academic Computing Services.
user’s workstation. This can be problematic for students who want to read mail from various locations.

Using IMAP, mail can be read locally but all changes are sent to the server. So, for example, if you move a message to another folder at home, and then check your mail at school (whether from Siren or Elm), you’ll see the message in the correct folder.

Another advantage of IMAP is that when you open a mail folder only the headers of messages are downloaded. This helps users who read mail over a slow, dial-up communications link. Siren also supports MIME attachments and off-line mail reading and folder management.

- NetNews: SPIKE uses the news reader included with Netscape. This news reader offers a number of key features: its display of article “threads”—the sequence of articles and follow-up messages—is clear and logical and it provides an identical client on Windows, Mac, and UNIX platforms. One of Netscape’s most compelling features is its “live links” to the Web—if a news article contains a reference to an Internet resource (in URL format), you can simply click on the link to access the resource. You can thus transparently switch between reading news and browsing the Web.

As part of the SPIKE installation, students are automatically subscribed to several newsgroups of interest to Wharton students.

- World Wide Web: SPIKE’s Web button launches Netscape Navigator starting at the Wharton Information Network, Wharton’s home page on the Web. SPIKE also includes “helper applications,” such as Adobe’s Acrobat document viewer, and configures them to automatically launch when you select a Web resource that requires their use.

- Library: SPIKE takes students to electronic Library resources, such as Franklin (the online catalog), Lexis/Nexis, Dow Jones News/Retrieval, and hypertext editions of the Oxford English Dictionary and the Encyclopedia Brittanica. A Telnet client, required to access many Library resources, comes preconfigured to automatically launch as needed.

- Course Downloads: Students can download course files using a Web-based, point-and-click interface. They can either retrieve a ZIP archive of the entire data set or browse a list of file names and selectively download individual files.

- Who’s Who: Students can locate information on other students and faculty using a graphical front-end to query Wharton’s CSO database. Students can search by name or select a more detailed set of search criteria.

- Update: Students can keep their information current in Wharton’s CSO database by using this simple, forms-based option. In addition to changing current fields students can add additional categories that will be displayed when other (continued on next page)
students look up their information.

- Mailing Lists: Students can subscribe, create, or get information on mailing lists available at the School. Wharton uses the popular Majordomo mailing list program, which provides many features but requires cryptic commands embedded in mail messages. SPIKE provides a Web-based front-end that gives students easy access to these features.

Additional menu items in SPIKE provide access to Wharton’s systems, utility programs, and news and updates on SPIKE.

Since many of SPIKE’s services are available from the World Wide Web, SPIKE could have included a single button to launch a Web page that branched to other services. But, as Carol Katzman, Director of Student Computing at Wharton, points out “The goal was to present information based on student interests, not the underlying technology. We wanted the user to see what the technology can do, not how it does it.”

Going live

Generally, the reception from students has been positive, although the project was not without difficulties. Some students encountered problems installing the software, and some of the newer applications had a few bugs. As Glenn Pereira, a Wharton MBA student who worked on the project, points out, “The installation difficulties are particularly unfortunate, since this is the first thing the students see. In some cases it created a negative impression before students even began to use the software.”

To make sure that SPIKE’s features were available to all users, WCIT supplemented the Windows SPIKE client with “NetSPIKE,” a World Wide Web implementation that provides access to most of SPIKE’s services to users of Macintosh or UNIX systems. NetSPIKE moves to the server much of the functionality of the local SPIKE client. If the user has an IP connection to PennNet (using Ethernet, PPP, or SLIP) along with Netscape and the necessary helper applications, SPIKE’s main server applications can be used.

And what about users that don’t have Ethernet, PPP, or SLIP? A text-based version of SPIKE provides access to SPIKE’s server features from Wharton’s UNIX systems. Although it doesn’t have the graphical “look and feel” central to SPIKE or NetSPIKE, when used in conjunction with Elm and Tin (a host-based news reader), it provides the functionality of SPIKE using only a vt100 terminal interface.

The future: SPIKE part deux?

What’s in the future for SPIKE and electronic communications at the Wharton School? “Our first priority is to improve the installation procedure” says Katzman. “SPIKE is easy to use once you get it running, but the ease of installation varies greatly depending on your computer system configuration.”

The next step is to increase the variety and richness of the resources available through SPIKE. Students are working with Wharton’s graduate and undergraduate divisions to help them provide more information electronically. And richer content can easily be provided as a part of the communications process using technologies like the Web and MIME-based e-mail packages. Wharton has already taken steps in this direction by moving some information away from simple ASCII text and HTML toward richer formats such as the Portable Document Format (see Penn Printout, Acrobat Network, September 1994) used in Adobe’s Acrobat software.

“But the most important information in SPIKE is generated by the students,” says Katzman. “The core content of SPIKE is communication among students and between students and faculty—that’s the key value SPIKE provides to the School.”

KENDALL WHITEHOUSE is an Associate Director for Wharton Computing and Information Technology.
Electronic Calendar

ISC hands-on courses

These courses meet at the Computing Resource Center (CRC), 3732 Locust Walk.

Prerequisites: A knowledge of elementary DOS commands is required for all training courses on application software for Windows PCs. To fulfill the requirement you may complete an ISC DOS seminar or tutorial, or have equivalent experience.

Cancellation: If you cannot attend a course, you must cancel 48 hours in advance. Failure to do so will exclude you from registering for other ISC courses that semester.

Late Arrival: If you are more than five minutes late, your seat will be given to someone on the waiting list. No one will be admitted later than 10 minutes after the start of class.

Registration & Information: Registration is required. Registrants must complete prerequisites before registering for a course. Individuals must register themselves; we will not accept registrations by a third party. Call 573-3102.

Registration for all ISC hands-on classes begins Thursday, October 26. Registration is required.

Courses for DOS and Windows users

What you Really Need to Know about DOS
November 1, noon–1:30 PM; November 24, noon–1:30 PM
Covers basic system parts, terms, and commands needed to get started using DOS. Includes a 1/2 hour practice session. Fulfills DOS prerequisite.

Introduction to Windows
November 2, 9:30 AM–1:30 PM
Covers basic Windows concepts, including using the program manager, working with menus and dialog boxes, manipulating windows, and using the task list. Prerequisite: DOS seminar or tutorial.

Introduction to WordPerfect 6.0 for Windows
November 6, 1 PM–4 PM
Covers the basic elements of word processing using WordPerfect 6.0. Experience in creating, saving, retrieving, editing, and printing files. Prerequisite: Windows course or tutorial.

Introduction to Lotus 1-2-3 for Windows
November 15, 1 PM–4 PM
Covers creation and basic use of Lotus 1-2-3 spreadsheets: entering data, formatting ranges, using Lotus 1-2-3 functions, writing formulas, and printing. Prerequisite: Windows course or tutorial.

Intermediate WordPerfect 6.0 for Windows
November 21, 9:30 AM–12:30 PM; November 30, 1:30–4:30 PM
Covers features needed in complex documents, such as glossary, spelling checker, hyphenation, footnotes, merge, moving text between documents, and setting up tables. Prerequisite: Introduction to WordPerfect for Windows 6.0 or equivalent.

Courses for Macintosh users

Introduction to Excel Spreadsheets
November 1, 1 PM–4 PM
Covers the basic functions of an electronic spreadsheet. Includes entering, editing, and formatting data; using functions; writing formulas; and printing.

Introduction to Microsoft Word (FLS)*
November 7, 9:30 AM–12:30 PM; November 14, 9:30 AM–12:30 PM
This is a facilitated learning session (FLS). A facilitator is present, but attendees work at their own pace. Covers the basic elements of word processing on a microcomputer. Experience in creating, saving, retrieving, editing, and printing files.

Intermediate Microsoft Word
November 24, 9:30 AM–12:30 PM; November 28, 1 PM–4 PM
Covers features needed in complex documents, such as glossary, spelling checker, hyphenation, footnotes, merge, moving text between documents, and setting up tables. Prerequisite: Introduction to Word or equivalent.

Mainframe course

Electronic Data Retrieval and Download
Class given on demand
Developed and taught by UMIS staff; covers data retrieval from the administrative mainframe using TableTalk. Call 573-3102 for details.

Technology Learning Services (TLS), ISC’s training group, offers additional services to departments, including custom training classes, learning needs assessment, and lab rental. TLS also offers other learning resources such as instructional tip sheets and tutorials. Call 573-3102 for more information.
Electronic Calendar

**ISC B&P seminars**

*Bits & Pieces seminars meet for one hour at the CRC, 3732 Locust Walk, unless otherwise noted. Registration is not required.*

**Introduction to Netscape**

November 3, noon–1 PM; November 7, 1 PM–2 PM; November 14, 1 PM–2 PM; November 21, noon–1 PM; November 27, noon–1 PM

Introduction to Internet browsers using Netscape. Covers configuring Netscape to launch the Penn Home Page, setting preferences, creating hotlists, and navigating to popular Internet sites.

**Introduction to Fetch (Mac)**

November 16, 1 PM–2 PM

Introduction to file transfers over the Internet using Fetch. Covers starting Fetch, connecting to a host, short cuts, and viewing and downloading files.

**Introduction to WS_FTP (Windows)**

November 30, noon–1 PM

Introduction to file transfers over the Internet using WS_FTP. Covers starting WS_FTP, connecting to a host, short cuts, and viewing and downloading files.

**Biomedical Library**

*All courses meet in the Biomedical Library Lab. Call 898-5817 or register online via http://www.library.upenn.edu/biomed/.*

**Intro to OVID MEDLINE and CINAHL/Nursing**

November 1, 4–6 PM; November 2, 10 AM–noon; November 9, 2–4 PM; November 10, 9–11 AM; November 14, 1–3 PM; November 16, 11 AM–1 PM; November 29, 1–3 PM

The OVID search system offers access to the full MEDLINE database, as well as the CINAHL/Nursing database. The course covers basic OVID search techniques, remote access, printing, and downloading. Advanced OVID search techniques will also be demonstrated.

**Biomedical Information on the Internet**

November 1, 1–3 PM

An overview of basic Internet applications and activities, such as e-mail discussion groups, Newsgroups, Telnet, file transfer, and the World Wide Web, as they relate to the biomedical community. Registrants must obtain a Network ID and password before attending the course.

**Advanced OVID Subject Searching**

November 8, 3–5 PM; November 27, 10 AM–noon

How to execute effective searches using various systems for MEDLINE or CINAHL (e.g., OVID, Grateful Med, CDP, and SilverPlatter). Concentrates on how to use the thesaurus of subject headings. Topics include choosing broader or narrower terms to refine searches, using subheadings to focus results, combining subject headings to develop search strategies, and revising search strategies if a search fails to retrieve suitable citations. **Prerequisite:** Introduction to OVID.

**Searching the World Wide Web**

November 13, 9–11 AM

This workshop covers search and retrieval of biomedical information over the World Wide Web via both Lynx and Netscape network browsing software.

**Reference Manager/EndNote Plus**

By appointment. Call 898-9905

Topics include creating a database, entering references from the keyboard, importing references from databases, and editing and retrieving information.

**Enduser Searching using Grateful Med**

By appointment. Call 898-9905

Grateful Med, a fee-based end-user search system, allows access to numerous National Library of Medicine databases. Topics include searching MEDLINE offline, basic Medical Subject Heading searching, using Loansome Doc for interlibrary loan requests, and accessing other NLM databases.

**Van Pelt Library**

*All courses except the individualized training course meet in Room 502, Van Pelt-Dietrich Library Center. Registration is required. Sign up at Van Pelt Reference, call 898-8118, send e-mail to libref@pobox, or use the electronic form at http://www.library.upenn.edu/vanpelt/forms/workshop.html.*

**LEXIS/NEXIS Noontime Training**

November 6, noon–1 PM; November 13, noon–1 PM; November 20, noon–1 PM; November 27, noon–1 PM

Available for Penn students and faculty only. Covers how to access LEXIS/NEXIS and its many full-text files, including dozens of national and international newspapers, transcripts from news programs such as McNeil-Lehrer and NPR, state and federal legislation, opinion poll data, and much more.

**Internet Resources Noontime Training**

Philadelphia: November 7, noon–1 PM
**African-American Studies:**  November 14, noon–1 PM

**Sociology:**  November 21, noon–1 PM

**Psychology/Testing:**  November 28, noon–1 PM

One-hour sessions devoted to subject-specific Internet resources.

**Electronic Library Demonstration**

November 7, 10–11:30 AM; November 15, 2–3:30 PM

A demonstration of the Library’s electronic resources including Franklin, the online catalog; WILS; RLIN/Eureka; LEXIS/NEXIS; and Internet Resources available through the Library Web Home Page.

**MLA/OED/ARTFL Noontime Training**

November 9, noon–1 PM

This demonstration covers searching the online Oxford English Dictionary and searching the MLA (Modern Languages Association bibliography) via First Search. Also covers how to access ARTFL, the hypertext database of the American and French Research on the Treasury of the French Language.

**Britannica Online Noontime Training**

October 11, noon–1 PM; October 26, noon–1 PM


**RLIN/Eureka Noontime Training**

November 17, noon–1 PM

A one-hour introduction to RLIN/Eureka, a database listing 22 million books, journals, and manuscripts in over 50 research libraries. Also includes a look at its collection of journal index databases.

**Individualized Training on Electronic Resources**

Monday to Friday, 9:30–10 AM, Moelis Online Search Room. Advance registration is required

For Penn students, faculty, or staff who want individualized half-hour training on a specific electronic resource such as Franklin (Penn’s online catalog), a CD-ROM database, a commercial online system such as DIALOG, or a networked resource such as RLIN/Eureka or LEXIS/NEXIS (Note: LEXIS/NEXIS training for faculty and students only.

**Human Resources**

Registration is required. Call 898-6176.

**Overview of the Personnel/Payroll System**

November 6, 3–5 PM

5th Floor Conference Room, 3401 Walnut St.

This workshop designed for new employees provides an understanding of personnel/payroll terminology, processes, time frames, and contact offices.

**Online Personnel Processing**

November 7, 9 AM–noon

UMIS, Suite 265C, 3401 Walnut St.

This hands-on workshop covers how to use the UMIS administrative computer to maintain employee records.

**Prerequisite:** A basic understanding of employee types, job class codes, accounts, and subcodes.

**Lippincott Library**

All courses except the Online Training course meet in Room 121, Van Pelt-Dietrich Library Center. Registration is required for all courses except the Online Training. Sign up at Lippincott Reference Desk, call 898-5924, or send e-mail to lippinco@wharton.

**WWW Business Resources**

November 16, noon–1 PM

Introduction to Lippincott Library’s links to business sites on the World Wide Web.

**Lippincott Online Training**

Tuesdays, 9 AM, Peck Room, First floor Lippincott Library; advance registration required.

Fridays, 9 AM, Room 502, Van Pelt Library; registration required.

Focuses on learning how to use CD-ROM and timesharing databases for information retrieval.

**Hot Dates**

November

13  **Super User Group meeting**

     Noon–1:30 PM.  285-6 McNeil Building

     Info: Donna Milici, 898-0426 or donna@isc.

25  **Interactive Technologies Group meeting**

     Noon–1:30 PM.  Place to be announced

     Info: Donna Milici, 898-0426 or donna@isc; John MacDermott, 898-3046 or macderm@isc.

**Got a Hot Date?**

Send details to printout.isc.upenn.edu
Power searching. Pressing the Option key when clicking on the Criteria pop-up menu in System 7.5’s Find File dialog box allows you to search within files. It also gives you some additional search criteria that are not ordinarily available.

Ink jet warning. Don’t turn ink jet printers off via a power strip; use the on/off button on the printer. Turning an ink jet printer off without using the on/off button may cause the ink cartridge to dry out prematurely.

At Last! Eudora Pro, the commercial version of Eudora Light, the freeware e-mail program, now includes a spelling checker.

To restart a PowerMac after a system freeze, press and hold down the Control and Command keys, and then press the power-on key.

UPS is online. It’s 5 o’clock and you’re wondering just where your package from the man in brown is. No problem. You can track your shipment via UPS online. Just provide the UPS tracking number. You can also estimate charges for packages shipped in the US by using the UPS Package Rating Assistant. (http://www.ups.com)

AB(P)Cs. The American Association of State Colleges and Universities recently announced that roughly two-thirds of its members either have implemented or are planning to implement computer-literacy requirements for students. Only one-fifth are planning such requirements for professors.

Stop startup: To prevent items located in the Windows 3.1 Startup group from loading, hold down the Shift key while Windows loads.

Eudora, the popular e-mail software, was named after the American author Eudora Welty. The original programmer, Steve Dorner, named the program after the Welty story “Why I live at the P.O.”

Babes in toyland! That’s how you’ll feel after visiting F.A.O. Schwarz. As the oldest toy store in America, F.A.O. Schwarz prides itself on providing the best and most unusual toys to children of all ages. (http://www.faoschwarz.com)

RealAudio’s Web page demonstrates the excitement and power of online audio with live broadcasts of actual events, including news broadcasts, announcements, interviews, and conferences. Past broadcasts have included Mario Cuomo’s keynote address at the National Association of Broadcasters convention, ABC news coverage of Pope John Paul II’s visit to the United States, the OJ Simpson trial verdict, and Penn Professor David Farber’s keynote speech for the SIGCOMM 95 awards. (http://www.realaudio.com/)

Phil Zimmerman, the father of PGP (Pretty Good Privacy), has released a beta version of PGPfone. PGPfone lets you use your Macintosh as a secure telephone using modem-to-modem communications for real time conversations. (http://web.mit.edu/network/pgpfone/)

Apartment hunting? Looking for that large living room, two bedroom, central air, modern kitchen, walk-in closets, with laundry facilities? Try visiting Rent Net, the Online Apartment Guide. Rent Net features furnished and unfurnished apartments and corporate housing from 44 states and 250 cities nationwide. (http://www.rent.net/)

Book Stacks Unlimited has over 330,000 titles. Even if you don’t purchase anything, their “shelves” are worth browsing. In addition to a summary of bestsellers, a listing of book-related events, the complete works of copyright-free titles, and information about authors—ranging from biographies, pictures, sound, and selected works—check out their multimedia exhibit “Book Banning, Burning, and Censorship.” (http://www.books.com/)

Before installing Windows 95 on your office or home computer, check the Ethernet or PPP installation guides. From http://www.upenn.edu/computing/, click “Windows 95 Information.” Keep in mind Windows 95 isn’t supported yet.
I have a PCMCIA modem for my laptop. What should I do with it when I’m not using the modem—leave it in the laptop or take it out?

The card is better protected from shock, vibration, and dust inside your laptop than out. Once in your system, it should only be removed if you are swapping it with another PCMCIA card.

I use PPP to connect to PennNet. After using the Dialer to connect to PennNet and typing `mail.sas.upenn.edu` to access my account, everything appears scrambled and I can’t read my mail. What am I doing wrong?

You are using the Dialer incorrectly. The purpose of the Dialer is to establish a PPP connection to PennNet. Other applications, such as Host Presenter or Eudora, are used to connect to e-mail accounts.

To establish a PPP connection to PennNet and access your e-mail, first connect using the Dialer. When you see the annex prompt, type `ppp`. This establishes the PPP connection and minimizes the Dialer window.

Now you can access your e-mail account. In the PennNet-PPP program group, which was created when you installed PPP, you have an application called Host Presenter. Host Presenter allows you to set up a Telnet connection to your e-mail account. To do so, double click on the Host Presenter icon and then type in the host address of your e-mail account—`sas.upenn.edu` in your case—and then click the open button. You will be presented with the familiar login prompt to log in to your e-mail account with your user ID and password.

I want to purchase a modem for my old 386 system. I’m not doing anything fancy, all I want to do is read e-mail from home. I was planning to buy a 14.4 Kbps modem, but I wonder if there might be problems pairing a high-speed modem with such an old system?

Although the price of 14.4 Kbps modems has dropped significantly, there are a few things you should be aware of before putting a fast modem on an old 386 machine.

If you are purchasing an external modem, first find out what UART chip your computer has. The UART (Universal Asynchronous Receiver Transmitter) controls the flow of information in, an out of, the serial ports. Older UART chips can make modem speeds faster than 9,600 bps unreliable.

Check your documentation to find out what kind of UART your computer has. If you are using a current version of Microsoft Windows, you can use the Microsoft Diagnostics (MSD) program to find out what type of UART your computer has.

You can avoid UART problems by purchasing an internal modem, since most have built-in UART. Check the modem software to see what UART the modem has. You’ll need a 16550 or 16550AF UART in order to connect reliably at speeds greater than 9,600 bps.

What does the Netscape message “Cannot find DNS entry.” mean?

It means that Netscape cannot find the correct address of the place you tried to access. When you type a host address, for instance, `http://www.library.upenn.edu/`, Penn’s domain name servers are responsible for translating that name into a string of numbers associated with the Library Web.

If you type in the address of the Library incorrectly, you’ll get this message—try again. Another common reason is that your machine isn’t properly configured to access Penn’s domain name servers (or was accidentally changed). If you are using a Macintosh with MacSLIP, the Domain name and Domain Name Servers are set in the MacTCP control panel. If you are using a Windows PC with PPP, the Domain name and the Domain Name Servers are set in the Dialer in the Network Options dialog box (to access the Network Options dialog box open the Dialer, select the Edit button and then select the Network Settings.) The correct domain name for all three servers should be `upenn.edu` and their IP addresses should be 198.91.2.13, 198.91.254.1, and 128.91.254.4.

If the Domain name and the Domain Name Servers are set correctly, and you have typed in the correct address, the most likely cause of this message is a temporary network problem. In this case, try to access the location later.

CAROLINE FERGUSON is a Consultant for the Computing Resource Center.
Information Systems and Computing provides infrastructure for academic and administrative computing—including PennNet and many of Penn’s central business systems. ISC offers a core set of services and coordinates academic computing activities across Penn’s Schools.

ISC has eight units:

- **Academic Computing Services**—ACS (573-3587) serves users of information technology in the academic community. It advises on “open systems” technologies including UNIX, negotiates volume purchase agreements and site licenses, and provides referrals to electronic resources for instruction.
- **First Call** (57-FIRST or 573-4778)
- **Computing Resource Center**—CRC (3732 Locust Walk) Both organizations provide computing and networking support to complement the services offered by Schools and departments. The CRC also provides file translation, software distribution, and contract services for systems integration and on-site support.
- **Data Administration** (898-2171) promotes standards for data access, data security, and the University data dictionary; develops the University Data Model, a high-level blueprint of data relationships; provides business continuity planning; and assists in investigations of information security violations.
- **Data Communications and Computing Services**—DCCS (898-2883) plans and manages PennNet and its Internet gateways, as well as a set of network-based services, including electronic mail, FTP, NetNews, Whois, and World-Wide Web. Consults on AppleTalk and Novell local area networks.
- **ISC Communications Group** (898-1786) produces print and electronic documents, including Penn Printout, and works with other ISC units to make new services easier to learn and use.
- **Technology Learning Services**—(573-3102) provides computer learning resources for the University, develops and coordinates ISC training programs, develops and delivers learning programs for Schools and other University units, and monitors technology skills needs across campus.
- **University Management Information Services**—UMIS (898-4961) consults with administrative clients to identify information needs and acquires, implements, operates, and maintains administrative systems.

**If you’re interested in:**

**Contact:**

- Administrative data dictionary, data model ............. 215/898-2171
- Administrative systems access ........................................ 898-5045
- Administrative systems development ...................... 898-7581
- Billing for DCCS ...................................................... 898-1319
- Billing for UMIS ................................................... 898-4961
- Desktop Publishing Interest Group .......................... 898-6243
- Facilities management ............................................. 898-6286
- Help (hardware, software, e-mail, networking)
  - First Call helpline (help@isc) .................. 573-4778
  - Computing Resource Center walk-in help .... 3732 Locust Walk
- Interactive Technologies Group .................. 898-0426
- Information security (security@isc) .................. 898-2172
- Lab Special Interest Group .................. 898-0426
- Multimedia/New Media Center (nmc@isc) ........ 898-3046
- PennBack backup service .................................... 573-4778
- PennNet modem access (8 databits, no parity, 1 stopbit)
  - Basic service .................................................. 898-0834
  - Kennett Square area ........................................... 610/444-5593
  - High-speed PPP access .................................. 215/573-4PPP
- Penn Printout (printout@isc) .................. 898-0007
- Penn Video Network (video@isc) .................. 898-4336
- ResNet ................................................................. 573-9473
- Site licenses (ssl@isc) ........................................ 898-9090
- Super User Group .................................................. 898-0426
- Training and learning services .............. 573-3102
- Training labs at CRC ............................................. 573-3102
- Training labs at UMIS ......................................... 898-4961

Not sure? Call the ISC help line, First Call, at 57-FIRST (573-4778) or send e-mail to help@isc