UNIVERSITY OF MINNESOTA

Academic & Distributed Computing Services Short Course Bulletin

Information Services **Spring 1996**

Contents

If you wish to subscribe to this bulletin, call 625-1300 or send e-mail to:
short-courses@boombox.micro.umn.edu

Printed on recycled paper; mailed with Addressing and Mailing's Cheshire recyclable labels.

Registration by Mail begins Tuesday, March 12.

In-Person Registration begins Wednesday, March 20.

New Offerings

Based on your suggestions, each quarter we try to offer new classes to meet your requests. This quarter's courses include: Setting Up Your Internet Kit; Writing World-Wide Web Documents: Introduction to HTML Authoring; Publishing Data with a World-Wide Web Server ; Implementing Clickable Image Maps using WebStar; FileMaker Pro Database Access via the World-Wide Web; Scanning with PhotoShop; and Selecting with PhotoShop. New courses include: PowerPoint; PageMill; Whats New with PageMaker 6.0. Check page 3 for a complete list of classes.

Please check the course descriptions for more information on these new classes marked with ***New*** ➤. Based on your requests we have also modified some of the existing classes. These changes are indicated with ***Changed*** ➤. Beginning this quarter, we have begun offering some courses in the evenings and weekends.

Waiting Lists

If a class you wish to register for is already full, please leave your name on the waiting list. We will offer more sections of each class if based on the number of names on the waiting list.

Please let us know your concerns about our short courses. Call us at 625-1300 or send your comments via e-mail to:

short-courses@boombox.micro.umn.edu

Registration

Registration Policy

Many classes fill quickly. To avoid disappointment, register early. If a class is filled, ask to be put on a waiting list. We will offere more sections if there is sufficient interest.

Registration for all courses listed on the following pages is handled by Academic and Distributed Computing Services, 190 Shepherd Labs. **We do not accept phone or fax registration.**

Registration by Mail

Mail registration will begin Tuesday, March 12. To register by mail, include a registration form located on the last page of this bulletin for each person you wish to register. Fees must accompany your registration information in order for the data to be processed.On campus registrants: please include a return campus address so we can mail your confirmation notice to you. All registration information must be sent to:

Short Course Registration
Academic & Distributed
Computing Services
190 Shepherd Labs.

U.S. Postal users should send fees and the registration forms on the last page of this bulletin to:

Short Course Registration
Academic & Distributed
Computing Services,
University of Minnesota
190 Shepherd Labs
100 Union Street SE
Minneapolis, MN 55455-0421

Registration confirmation notices will be mailed to you. Confirmation letters are required to attend any of the short courses. **If you do not receive this notice two days prior to the first day of class, please contact the ADCS office at 625-1300 to confirm your registration and receive a copy of your notice.**

In-Person Registration

Walk-in registration will begin on Wednesday, March 20. Walk-in registrants may only register for a total of two people. You can register at the Academic & Distributed Computing Services office in room 190 Shepherd Labs, Monday through Friday, 8:00 am to 4:00 pm. Fees must accompany your registration.

Registration Deadline

Classes are filled in the order registration is received. Mail registrations are processed at the end of the day on which they are received. The deadline for registration for any class is 4:00 pm on the last working day before the class begins. For additional registration information, call 625-1300.

Fees

Fees must accompany your registration. You can pay fees with cash, check, or a University Intra-Institutional Voucher. Make checks payable to the University of Minnesota.

In the course descriptions, fees are shown in ascending order and apply to the following three groups: University students/University faculty and staff/Others.

Intra-Institutional Voucher (IV) Payments

If you pay by Intra-Institutional Voucher (IV), *credit* this ADCS account:

Area	Org	Sub Org	Rev Src	Sub Rev
357	2001	05	4410	10

The *debit* account must use Object 7300 and Sub Object code 32. Please include a name and phone number so we can call you if we have questions about the IV.

Departments *must* send or bring both the white *and* yellow copies of the IV to our office in 190 Shepherd Labs for registration. If both copies are not enclosed, your registration will not be accepted. We do not accept photocopies of IVs or on-line vouchers. IVs sent to the wrong location will not be registered.

New Policy for Cancellations and Refunds

If you cannot attend a class, please notify us by calling 625-1300. We need to hear from you so that we can contact people on our waiting lists. You can cancel your registration by mail or by phone.

To receive a refund, we must receive your cancellation notice two working days before the beginning the class. There will be a $10 cancellation fee. There will be no refund for courses with fees of $10 or less. If we must cancel a class, we will refund your registration fee in full.

Prerequisites

Look for this symbol: ✦
The ✦ symbol alerts you to prerequisites for the classes you want to attend.

Please note: Instructors will not slow down classes to accommodate students who have not mastered the stated prerequisites.

Classes begin on time! Instructors will not wait for late attendees, nor will they review material already covered.

Spring Quarter Classes

Operating Systems, Languages, and Fundamentals
See Macintosh Courses, IBM-Compatible Courses, Central Systems Courses, Operating Systems and Languages
Mac Fundamentals
Drawing and Painting Fundamentals
More System 7.5
Introduction to DOS 6
Understanding DOS Memory
Mouse Techniques
Introduction to Windows 3.1
Windows 95
Introduction to UNIX

Communications, E-Mail, and Networking
See Communications and Network Courses
World Wide Web (Mac &Win)
Gopher (Mac &Win)
Telnet & FTP (Mac &Win)
UseNet News (Mac &Win)
Electronic Mail Using POPmail (Mac & Win)
Writing World-Wide Web Documents (Mac & Win)
Adobe PageMill (Mac)
Setting Up Your Internet Kit (Mac, Win 3.1, Win 95)
Publishing Data with a World-Wide We Server (Win)
Publishing Data with a World-Wide Web Server (Mac)
Implementing Clickable Image Maps Using WebStar
FileMaker Pro Database Access via the World-Wide Web Using WebStar

Desktop Publishing
See Macintosh Courses
Introduction to PageMaker 6.0 (Mac)
Intermediate PageMaker 6.0: Styles (Mac)
What's New with PageMaker 6.0?

Databases
See Macintosh Courses and IBM-Compatible Courses
Introduction to FileMaker Pro 2.1 (Mac)
Introduction to FileMaker Pro 3.0 (Mac &Win)
Intermediate FileMaker Pro 2.1 (Mac &Win)
Intermediate FileMaker Pro 2.1: Import and Export (Mac)
Introduction to FoxPro (Win)
Introduction to Access (Win)
Intermediate Access: Using Queries (Win)
Intermediate Access: Using Macros (Win)
Intermediate Access: Advanced Forms and Reports (Win)
Relational Database Basics and Design

Multimedia and Presentation
See Macintosh and IBM-Compatible Courses
Introduction to Macromedia Director (Mac)
Introduction to Macromedia Authorware (Mac)
Scanning with PhotoShop (Mac)
PhotoShop Basics (Mac)
Intermediate PhotoShop: Selecting (Mac)
Introduction to PowerPoint (Win)

Spreadsheets
See Macintosh Courses and IBM-Compatible Courses
Introduction to Spreadsheets (using Excel) (Mac & Win)
Excel Basics (Mac & Win)
Intermediate Excel: Charts (Mac & Win)
Excel Macros Using Visual BASICs (Win)

Statistics
See Statistics Courses
Introduction to SAS
SPSS for Windows, An Introduction
SAS/Stat
SAS Programming Techniques
More SAS Programming Techniques

Word Processing
See Macintosh Courses and IBM-Compatible Courses
Introduction to Word (Mac and Windows)
Intermediate Word: Document Formatting (Mac & Win)
Intermediate Word: Paragraph Formatting (Mac & Win)
Intermediate Word: Tables (Mac and Win)
Intermediate Word: Merge Documents (Mac & Win)

Digital Media Center (DMC)
Writing World-Wide Web Documents (Mac)
Adobe PageMill (Mac)
Introduction to Macromedia Director (Mac)
Introduction to Macromedia Authorware (Mac)
Scanning with PhotoShop (Mac)
PhotoShop Basics (Mac)
Intermediate PhotoShop: Selecting (Mac)
Introduction to Digital Video (Mac)
Introduction to QuickTime VR (Mac)
Introduction to Asymetrix Multimedia Toolbook (Win)
Exploring Learning Communities Using Multimedia and Internet Tools
Interface Design for Multimedia
Multimedia Intellectual Property: Copyright Resources on the Internet
Multimedia Development: Resources on the Internet

Communications and Network Courses

- **Hands-on. Limited enrollment.**
- **(StP)** indicates a class taught on the St. Paul campus. All other classes are taught on the Minneapolis campus.

World Wide Web

Learn how to use the Netscape World Wide Web (WWW) client on Mac or Windows to browse the Web. You'll learn how to create bookmarks, quickly access your favorite sites, search the Web for particular topics, access WWW subject catalogs, and jump to given locations.

(Windows) World Wide-Web

✦ Prerequisite: mastery of *Introduction to Windows.*
✦ Prerequisite: mastery of *Mouse Techniques.*

WWeb101 April 4 from 9 am to noon
WWeb102 April 11 from 1 to 4 pm
WWeb103 April 16 from 9 am to noon
WWeb104 April 18 from 5 to 7 pm **Eve.**
WWeb105 May 2 from 5 to 7 pm **Eve.**
WWeb106 May 20 from 1 to 4 pm
WWeb107 May 23 from 9 am to noon
Fees $10/25/55

(Mac) World-Wide Web

✦ Prerequisite: mastery of *Mac Fundamentals.*

MWeb101 April 3 from 9 am to noon
MWeb102 April 12 from 9 am to noon
MWeb103 April 16 from 1 to 4 pm
MWeb104 May 28 from 9 am to 12
Fees $10/25/55

Gopher

Use Gopher or Minuet to access the wealth of information known as "Gopherspace." By completing this class and individual exercises, you'll learn how to create bookmarks to easily access your favorite sites, search Gopherspace using VERONICA, use Gopher subject catalogs and jump directly to given Gopher items.

(Windows) Gopher

✦ Prerequisite: mastery of *Introduction to Windows.*
✦ Prerequisite: mastery of *Mouse Techniques.*

WGoph101 April 9 from 1 to 4 pm
Fees $10/25/55

(Mac) Gopher

MGoph101 April 10 from 1 to 4 pm
Fees $10/25/55

Telnet and FTP

The first part of *Telnet and FTP* will explain how, why, and when to use Telnet to communicate with certain computers on the Internet. Examples will be given of connecting to systems that provide you with useful information, such as library computers (LUMINA). You will also complete some Telnet exercises.

The second part will explain how and why to use the File Transfer Protocol (FTP) to transfer files to and from a remote computer system and how to search Internet FTP sites using Archie. Related file concepts will also be discussed. Examples of useful FTP sites will be given, along with some interesting exercises. **Prior experience using a Macintosh or PC/Compatible is required.**

(Windows) Telnet and FTP

✦ Prerequisite: mastery of *Introduction to Windows.*
✦ Prerequisite: mastery of *Mouse Techniques.*

WTEL101 April 18 from 1 to 4 pm
Fees $10/25/55

(Mac) Telnet and FTP

✦ Prerequisite: mastery of *Mac Fundamentals.*

MTEL101 April 10 from 9 am to noon
MTEL102 April 17 from 1 to 4 pm StP
Fees $10/25/55

UseNet News

An Introduction to the hidden world of UseNet and UseNet news groups. We will discuss what UseNet is and isn't in detail and talk about nettiquette, the news group hierarchy, reading and subscribing to news groups, different types of news groups, news threads, etc. We will also give examples of some very useful news groups for new users and for people in the University community. Exercises in this section will help guide you through this new and exciting world. **Prior experience using a Macintosh or PC/Compatible is required.**

(Windows) UseNet News

✦ Prerequisite: mastery of *Introduction to Windows.*
✦ Prerequisite: mastery of *Mouse Techniques.*

WUSE101 April 23 from 9 am to noon
Fees $10/25/55

(Mac) UseNet News

✦ Prerequisite: mastery of *Mac Fundamentals.*

MUSE101 May 13 from 9 am to noon
Fees $10/25/55

Communications and Network Courses

Electronic Mail

This 2.5-hour *hands-on* class will introduce you to E-mail. You will learn to configure POPmail for Macintosh, POPmail for Windows, or Minuet, to understand the Internet addressing structure, and to send and receive messages.

(Windows) Electronic Mail Using WS_POPmail for Windows

- ✦ Prerequisite: mastery of *Introduction to Windows.*
- ✦ Prerequisite: mastery of *Mouse Techniques.*

Electronic Mail Using POPmail for **Windows** is offered once.
POPW101 April 16 from 1:30 to 4 pm
Fees $5/15/40

(Mac) Electronic Mail Using POPmail

- ✦ Prerequisite: mastery of *Mac Fundamentals.*

Electronic Mail Using POPmail for the **Macintosh** is offered once.
POPM101 April 15 from 1:30 to 4 pm
Fees $5/15/40

Writing World-Wide Web Documents: Introduction to HTML Authoring

The hypertext markup language (HTML) is used to create documents that can be read by World-Wide Web (WWW) clients. In this hands-on class you will learn to create WWW documents on a Macintosh or Windows platform. This class focuses on HTML 2.0. Topics covered are:

- HTML formatting directives
- Placing links in documents
- Including images and sounds in HTML documents
- Checking the validity of your HTML code
- A discussion of new HTML features such as tables

Writing World-Wide Web Documents in Windows

Writing World-Wide Web Documents in Windows is taught over two days and is offered twice. We will use the Hot Dog HTML editor.

- ✦ **Prior experience using Windows 3.1 is required.**
- ✦ No previous HTML experience is assumed. You should, however, be familiar with using a WWW client to browse the Web.

HTMLW101 April 9, 11 from 9 to noon
HTMLW102 May 21, 23 from 1 to 4 pm
Fees $25/50/120

Writing World-Wide Web Documents on a Macintosh

Writing World-Wide Web Documents on a Macintosh is taught over two days and is offered three times. We will use the BBEdit text editor with HTML extensions.

- ✦ **Prior experience using a Macintosh is required.**
- ✦ No previous HTML experience is assumed. You should, however, be familiar with using a WWW client to browse the Web.

HTMLM101 April 9, 11 from 9 to noon
HTMLM102 April 17, 18 from 9 am to noon **StP**
HTMLM103 April 24, 25 from 9 am to noon **StP**
HTMLM104 May 21, 23 from 1 to 4 pm
Fees $25/50/120

Adobe PageMill (Mac)

Adobe PageMill hides the complexity of HTLM (hypertext markup language), so you can easily design colorful, dynamic web pages. In this 5-hour class, you will learn how to use the tools available in PageMill. HTML will not be covered (see the above classes).

- ✦ **Prior experience using a Macintosh is required.**
- ✦ Prerequisite: Mastery of skills relating to text and graphic selection as well as dragging and dropping text and objects.
- ✦ Prerequisite: No previous HTML experience is assumed. You should, however, be familiar with using a WWW client to browse the Web.

PageMill is taught over two days and is offered once.
PMill101 June 5, 7 from from 9:30 to noon
Fees $25/50/120

Seminars

- **No hands-on.**
- **Limited enrollment.**

Setting Up Your Internet Kit

This class will show you how to set up each of the programs you get with the Internet Tool Kit along with a few basics about how to use each. It will not go into any great detail about how to use any program and is intended to get people ready to explore more on their own. If you want to learn more details about a specific program take that specific course. Part of this class will be devoted to setting up the Internet Kit modem software.

Communications and Network Courses

Windows 3.1 Internet Kit
✦ Prerequisite: *E-mail Orientation*
WIK101 April 24 from 1:30 to 4 pm
WIK102 May 8 from 5 to 7:30 pm **Eve.**
Fees S5/20/45

Windows 95 Internet Kit
✦ Prerequisite: *E-mail Orientation*
W95IK101 May 7 from 1:30 to 4 pm
W95IK102 May 9 from 5 to 7:30 pm **Eve.**
W95IK103 May 28 from 1:30 to 4 pm
Fees S5/20/45

Mac Internet Kit
✦ Prerequisite: *E-mail Orientation*
MIK101 April 23 from 9:30 to noon
Fees S5/20/45

Publishing Data with a World-Wide Web Server
In this class, we will discuss the fundamentals of World-Wide Web server administration. You will learn to install, configure, and maintain an HTTP (hypertext transfer protocol) server on either the Macintosh, Windows 3.1 or Windows 95 system to furnish WWW documents to the University campus and the world.

Publishing Data with a World-Wide Web Server on a Windows System
Publishing Data with a World-Wide Web Server on a Windows System is offered once. We will use the WebSite server software
WSW101 May 2 from 1 to 4 pm
Fees S10/25/50

Publishing Data with a World-Wide Web Server on a Macintosh
Publishing Data with a World-Wide Web Server on a Macintosh is offered once. We will use the WebStar server software.
WSM101 April 17 from 1 to 4 pm
Fees S10/25/50

Implementing Clickable Image Maps Using WebStar
Are you interested in adding clickable, mapped images to documents on your MacHTTP or WebStar World-Wide Web server. You will learn how to create images and corresponding maps for inclusion on your server. Simplifying tools and issues of presentation will be discussed. There will be time at the end of the seminar for questions.
✦ Prerequisite: completion of *Writing World-Wide Web Documents* or equivalent knowledge.
✦ Prerequisite: completion of *Publishing Data with a World-Wide Web Server on a Macintosh* or equivalent knowledge.

Implementing Clickable Image Maps using WebStar is taught over two days and offered once.
WebCI101 May 6 from noon to 1 pm
Fees S10/20/25

Brown Bag Seminars

These 1-hour seminars are offered during the noon hour. You are welcome to bring your lunch.

FileMaker Pro Database Access via the World-Wide Web Using WebStar (Mac)
The Macintosh database FileMaker Pro can be searched and modified using World-Wide Web forms and a MacHTTP or WebStar server. You will learn how to set up and customize interfaces between Web clients and your FileMaker Pro databases. Security and data-protection issues will be discussed. There will be time at the end of the seminar for questions.
✦ Prerequisite: completion of *Writing World-Wide Web Documents* or equivalent knowledge.
✦ Prerequisite: completion of *Publishing Data with a World-Wide Web Server on a Macintosh* or equivalent knowledge.
✦ Prerequisite: completion of *Introduction to FileMaker Pro* or equivalent knowledge.

FileMaker Pro Database Access via the World-Wide Web Using WebStar is offered once.
WebFM101 May 15 from 2 to 4 pm
Fees S10/20/50

E-Mail Orientation

All University of Minnesota faculty, staff, and all students registered in a degree program automatically receive an electronic mail (E-mail) account. This E-mail account also provides access to other electronic information resources on the worldwide Internet. Academic and Distributed Computing Services provides training.

We encourage you to attend one of these free orientation sessions. These sessions will give you an overview of the campus network and demonstrate how to use your E-mail account and other network services.

Weekday	Date	Time	Location
East Bank Campus			
Tuesday	April 9	10:30 – noon	2 Nicholson Hall
	April 16, 23	1:30 – 3:00 pm	2 Nicholson Hall
	May 14	1:30 – 3:00 pm	2 Nicholson Hall
Wednesday	April 3	1:30 – 3:00 pm	2 Nicholson Hall
	May 1	10:30 – noon	2 Nicholson Hall
	May 22, 29	1:30 – 3:00 pm	2 Nicholson Hall
Thursday	March 28	1:30 – 3:00 pm	2 Nicholson Hall
Friday	May 10	10:30 – noon	2 Nicholson Hall
West Bank Campus			
Friday	April 19	1:30 – 3:00 pm	130 Blegen Hall
	May 17	2:00 – 3:30 pm	130 Blegen Hall
St. Paul Campus			
Thursday	May 23	2:00 – 3:30 pm	64 Biological Sciences
Friday	May 3	10:30 – noon	64 Biological Sciences

Central Systems Courses

- **Not hands-on unless specified.**
- **Limited enrollment.**

These classes teach the operating systems and software on large central system computers that are used by many people simultaneously for administrative and research projects. An account is not mandatory for this class. The fee for these classes covers some of the cost of class materials. To access these central systems for personal use, you must have an account. For the accounting office phone numbers look under *General Information* on page 23.

CMS

CMS Introduction

This is a 4-hour *hands-on* training class in CMS, the operating system on the IBM mainframes. *Call 624-6235 to set up a training session.*

NOS/VE

Introduction to NOS/VE

Connecting to NOS/VE, entering commands, using full-screen capabilities, managing files, obtaining output, file transfers, and on-line help are taught in this class. *Call 626-8366 to schedule a training session.*

NOS/VE Full Screen Editor

In this class, you will be taught how to create and edit NOS/VE files, expand on-line help for each function, and customize functions. *Call 626-8366 to schedule a training session.*

Statistics Courses

- **Hands-on unless otherwise noted.**
- **Limited enrollment.**

Introduction to SAS

The essentials of SAS (Statistical Analysis Software) for data analysis and statistics are covered in this 12-hour *hands-on* course.

✦ Prerequisite: familiarity with the operating system you plan to use, i.e., **CMS, MVS, PC/MS-DOS, OS/2, UNIX, VMS, Windows**, or **Macintosh** including basic commands and file management. This information will ***not*** be covered by the instructor.

Introduction to SAS is taught over four days. Each day is split between lecture and lab.
SAS101 April 9, 11, 16, 18 from 1 to 4 pm **StP**
SAS102 April 22, 24, 29, May 1 from 1 to 4 pm
Fees S35/65/150.

SPSS for Windows, An Introduction

SPSS, the Statistical Package for the Social Sciences, is a general purpose statistical package widely used in industry and academia. In this basic course we introduce you to SPSS's Windows environment. The basic principles taught here will help you understand and use SPSS on the other platforms (for example, Macintosh). We will also briefly introduce you to the SPSS command structure, which is used on mainframe computers as well as PCs and Macs.

✦ Prerequisite: mastery of *Introduction to Microsoft Windows*, including basic commands and file management. This information will ***not*** be covered by the instructor. An introductory statistics course would be helpful, but is not mandatory.

SPSS for Windows, An Introductions is taught over three days and offered once.
SPSS101 May 13, 15, 17 from 10 am to noon
Fees S25/S50/S120

Seminars

- **No hands-on.**
- **Limited enrollment.**

SAS/STAT

The statistical analysis features of SAS, such as correlation, regression, and analysis of variance, are covered in this 2.5-hour class.

✦ Prerequisite: *Introduction to SAS* or equivalent knowledge.

SAS/STAT is taught once.
SASS101 May 16 from 1:30 to 4 pm
Fees S15/20/40.

SAS Programming Techniques

This 3-hour demo class covers SAS DATA step programming techniques more advanced than those covered in *Introduction to SAS* including reading raw data files, merging, subsetting, and reshaping your data.

✦ Prerequisite: *Introduction to SAS* or equivalent knowledge.

SAS Programming Techniques is offered once.
SASP101 May 21 from 1 to 4 pm
Fees S15/20/40.

More SAS Programming Techniques

This 2.5 hour class covers more techniques for working with your data using SAS, including basic use of Proc SQL and Proc Expand. Proc SQL is SAS's implementation of Structured Query Language, and allows you manipulate SAS data sets using SQL. Proc Expand can be used to manipulate time series data, including collapsing or expanding sampling intervals.

✦ Prerequisite: *Introduction to SAS* or equivalent knowledge.

More SAS Programming Techniques is offered once.
SASP201 May 23 from 1:30 to 4 pm.
Fees S15/$20/$40

Macintosh Courses

- **Hands-on. Limited enrollment.**
- **All classes are taught using System 7.5.**

General

Macintosh Fundamentals

This 3-hour class is for new Macintosh users. Mastery of the skills covered in this class is a prerequisite for nearly all our other Macintosh classes.

In this class you will learn the four basic mouse skills: pointing, clicking, double clicking, and dragging. You will learn to work with the Macintosh's "desktop," the menu bar, and icons. By dragging or moving icons with the mouse you will learn how to rearrange the desktop.

You will learn how to
- select an icon and start up programs
- use "pull down" command menus with the mouse
- select commands to accomplish your work
- exit from programs.

You will
- work in and manipulate a window
- learn how to use the *Cut*, *Copy*, and *Paste* commands
- use a desk accessory–the Scrapbook.

You will learn how to work with documents to
- create a new document
- retrieve existing documents
- put away the document you are working with
- name documents
- save documents.

You will learn how to work with folders and move from one folder to another.

Finally, you will learn how to make those important backup copies of your work on floppy disks and the importance of using the Mac's *Shut Down* command before turning off your machine.

Macintosh Fundamentals is offered three times.
MF101 April 2 from 1 to 4 pm
MF102 April 18 from 9 to noon
MF103 May 1 from 9 am to noon

Fees S15/20/40

Drawing and Painting Fundamentals

This class is for anyone who wants to use clip art or graphics in their documents. This class is a prerequisite for *PageMaker, 4th Dimension, Persuasion, Director, and PhotoShop*. In this 2.5-hour class you will be exposed to two different types of graphics programs, discover their strengths and weaknesses, and learn how to integrate them. You will use *MacDraw*, object-oriented software, and *MacPaint II*, bit-map freehand painting software, to create illustrations. You will learn how to use computer graphics tools as well as how to copy, move, and transform images. **Prior experience using a Macintosh is required.**

✦ Prerequisite: mastery of *Mac Fundamentals.*

Drawing and Painting Fundamentals is offered three times.
DR101 April 4 from 1:30 to 4 pm
DR102 April 17 from 1:30 to 4 pm
DR103 May 3 from 9:30 to noon
Fees S15/20/40

More System 7.5

This 2.5-hour class is for Macintosh users who are already familiar with System 7.5 basics and are ready to learn more. We go over the Finder, fonts, the Apple menu, virtual memory, file sharing, aliases, and more. **Prior experience using a Macintosh is required.**

✦ Prerequisite: mastery of *Mac Fundamentals.*

More System 7.5 is offered once.
SYS7101 May 22 from 1:30 to 4 pm **StP**
Fees S15/20/40

Word Processing

Introductory Courses

Introduction to Word 6.0

This 6-hour class is for users new to Word 6.0. You will use character and paragraph formatting and move blocks of text. In addition, you will learn how to: move quickly through your documents; manipulate multiple windows; set margins, indents, page numbers, headers and footers; use the spelling checker; and preview your work. You will also learn "drag and drop" and how to use the standard and formatting toolbars.

Macintosh Courses

- Prerequisite: mastery of *Mac Fundamentals.*

Introduction to Word is taught over three days and is offered once.
WD101 April 22, 24, 26 from 10 to noon
Fees $45/65/100

Intermediate Courses

Intermediate Word 6.0: Document Formatting

This class covers the options available in Word's Document Layout dialog box. In this 3-hour class you will learn how to divide a document into sections; Allow space for binding; add headers and footers to a document; create multiple-column format; and insert footnotes.

- Prerequisites: mastery of skills covered in *Introduction to Word:* especially knowing how to move through files quickly and how to select text.

Intermediate Word 6.0: Document Formatting is offered once.
WDMD101 May 2 from 9 am to noon
Fees $35/45/85

Intermediate Word 6.0: Paragraph Formatting

Expand your paragraph formatting knowledge beyond the information covered in the *Introduction to Word* class. In this 5-hour class, you will learn how to set tabs, vertical lines, and tab leader characters; control line spacing and page breaks; add white space between paragraphs and borders around text; and transform the first character or word into a drop cap.

- Prerequisites: mastery of skills covered in *Introduction to Word*: applying character and paragraph formatting, selecting text, and moving quickly through files.

Intermediate Word 6.0: Paragraph Formatting is taught once over two days and is offered once.
WDMPF101 May 7, 9 from 9 am to noon
Fees $45/65/120

Intermediate Word 6.0: Tables

The Table feature lets you create columns of text, numbers, or graphics within your document. You can use the Table feature to create simple tabular layouts, such as a two-column list, or more complex page designs, such as business forms or scripts for plays. In this 2.5-hour class, you will learn how to create, modify, and format a table structure; format table cells; convert text to a table or a table into text; add lines to the table grid and shading to cells.

- Prerequisites: mastery of skills covered in *Introduction to Word*: applying character and paragraph formatting, selecting text, and moving quickly though files.

Intermediate Word 6.0: Tables is offered once.
WDMT101 May 15 from 9 am to noon
Fees $35/45/85

Intermediate Word 6.0: Merge Documents

You can use this Word feature when you wish to produce multiple versions of a document with each version having customized information added from a second document. This 2.5-hour class covers how to produce form letters and mailing labels by using the Print Merge Helper.

- Prerequisites: mastery of skills covered in *Introduction to Word*: applying character and paragraph formatting, selecting text, and moving quickly though files.

Intermediate Word 6.0: Merge Documents is offered once.
WDMM101 May 30 from 9:30 to noon
Fees $35/45/85

Database

Introductory Courses

Introduction to FileMaker Pro 2.1

This 5-hour class covers basic concepts of database management. You will learn how to create a database and how to enter data; find, change and sort information; and design simple reports and mailing labels.

- Prerequisite: mastery of *Mac Fundamentals.*
- Prerequisite: mastery of *Drawing and Painting Fundamentals.*

Introduction to FileMaker Pro 2.1 is taught over two days and is offered once.
FM101 May 6, 8 from 1:30 to 4 pm
Fees $45/55/100

Macintosh Courses

New ➤ Introduction to FileMaker Pro 3.0

This 5-hour class covers basic concepts of database management. You will learn how to create a database and how to enter data; find, change and sort information; and design simple reports and mailing labels.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of *Drawing and Painting Fundamentals.*

Introduction to FileMaker Pro 3.0 is taught over two days and is offered once.
FM102 April 23, 25 from 1:30 to 4 pm StP
Fees $45/55/100

Intermediate Courses

Intermediate FileMaker Pro 2.1

This 5-hour class covers more advanced topics such as columnar reports with subtotals, lookup files, calculations, and scripting. **Prior experience using a Macintosh is required.**

- ✦ Prerequisite: mastery of *Mac Fundamentals* and *Drawing and Painting Fundamentals.*
- ✦ Prerequisite: mastery of *Introduction to FileMaker.*

Intermediate FileMaker is taught over two days and is offered once.
FM201 May 21, 23 from 9:30 to noon
Fees $45/55/100

FileMaker Pro 2.1 Topics: Import and Export

This 1.5-hour class covers importing, exporting, and updating records in a database.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of *Introduction to FileMaker Pro.*

FileMaker Pro Topics: Import and Export is offered once.
FMI201 May 24 from 10:30 to noon
Fees $10/15/25.

Spreadsheets

Introductory Courses

New ➤ Introduction to Spreadsheets (using Excel 5.0)

This 1.5-hour class is for those who have never seen or used a spreadsheet before. You will learn about components of a worksheet, how to enter and edit data, how to move around the spreadsheet, and how to open and close files. The ability to do these tasks quickly is required for all other Excel classes.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*

Introduction to Spreadsheets is offered twice.
EX101 April 16 from 10:30 to noon
EX102 May 20 from 2:30 to 4 pm
Fees $10/$15/$25

Excel Basics

In this 5-hour class you will create several spreadsheets with formulas and functions. Topics include formatting, relative and absolute addressing, copying and pasting, split screens, and print preview.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of *Introduction to Spreadsheets.*

Excel Basics is taught over two days and is offered twice.
EXB101 April 17, 19 from 9:30 to noon
EXB102 May 22, 24 from 1:30 to 4 pm
Fees $45/55/100

Intermediate Courses

Intermediate Excel 5.0 Topics: Charts

This 1.5-hour, hands-on class covers manipulating charts to fine-tune their appearance. Learn how to: modify the scale and markings of axes; change the appearance and content of text in a chart; use colors and styles other than a chart's defaults; and add and modify data series in a chart. **Prior experience using a Macintosh is required.**

- ✦ Prerequisite: mastery of *Excel Basics.*

Intermediate Excel Topics: Charts is offered once.
EX201 June 4 from 10:30 to noon
Fees $10/15/25.

Macintosh Courses

Multimedia

Introductory Courses

Introduction to Macromedia Director

This 5-hour class is for experienced Macintosh users who want to learn how to use Director to author multimedia materials. During the class, you'll create a basic multimedia presentation containing text, graphics, animation, and sound.

- Prerequisite: mastery of *Mac Fundamentals.*
- Prerequisite: mastery of basic Macintosh drawing and painting programs

Introduction to Macromedia Director is taught over two days and is offered once.
DIR101 May 7, 9 from 1:30 to 4 pm
Fees $45/55/120

Introduction to Macromedia Authorware

This 5-hour class is for experienced Macintosh users who want to learn how to use Authorware to author multimedia materials. During the class, you'll create a basic multimedia presentation containing text, graphics, animation, and sound.

- Prerequisite: mastery of *Mac Fundamentals.*
- Prerequisite: mastery of basic Macintosh drawing and painting programs.

Introduction to Macromedia Authorware is taught over two days and is offered once.
DIR102 June 5, 7 from 1:30 to 4 pm
Fees $45/55/100

Scanning with PhotoShop

In this 3-hour class you will learn the procedure for scanning photographs using the Apple One Scanner. We'll apply color correction techniques to the scanned images and compare the results. Bring one small color photo of your choice not larger than 4 x 6" for practice.

- Prerequisite: mastery of *Mac Fundamentals.*
- Prerequisite: mastery of basic Macintosh drawing and painting programs.

Scanning with PhotoShop is offered once.
PHSC101 April 11 from 1 to 4 pm
Fees $30/40/80

PhotoShop Basics

This 6-hour class is intended for the beginning PhotoShop user. We will focus on the basic concepts, basic selecting techniques, and color correction. You will learn to use the toolbox and palettes to create a composite image.

- Prerequisite: mastery of *Mac Fundamentals.*
- Prerequisite: mastery of basic Macintosh drawing and painting programs.

Introduction to Adobe PhotoShop is taught over two days and is offered once.
PH101 April 23, 25 from 1 to 4 pm
Fees $45/65/120

Intermediate Courses

Selecting with PhotoShop

This 6-hour class is intended for people who have used PhotoShop and are familiar with the basic concepts and using the marquis and lasso tools for selecting. We will work with all selection techniques including masks. You will also learn to use layers and text.

- Prerequisite: mastery of *Mac Fundamentals.*
- Prerequisite: mastery of basic Macintosh drawing and painting programs.
- Prerequisite: *PhotoShop Basics.*

Selecting with PhotoShop is taught over two days and is offered once.
PHSel101 May 8, 10 from 9 am to noon
Fees $45/65/120

Macintosh Courses

Desktop Publishing

Introductory Courses

Changed ➤ **Introduction to PageMaker 6.0**

In this 5-hour class you will put together a newsletter. You will create a template from scratch, manipulate master pages, and wrap text around graphics.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of *Drawing and Painting Fundamentals.*
- ✦ Prerequisite: mastery of basic skills using any Macintosh word processing software. If you can diagram your office using a drawing (not a painting) program, you have mastered these skills.

Introduction to PageMaker is taught over two days and is offered twice.
PM101 May 2, 3 from 1:30 to 4 pm
PM102 May 29, 30 from 1:30 to 4 pm
Fees $45/55/100.

Intermediate Courses

Intermediate PageMaker 6.0: Styles

This 3-hour class will build on concepts covered in the *Introduction to PageMaker* class. You will learn all about styles—how to define, edit, and delete them; how to expand style definitions to include *Based On* and *Next* options; and how to transfer style sheets from one document to another. Exercises will involve applying styles to existing text (no page layout or design).

- ✦ Prerequisites: mastery of skills covered *Introduction to PageMaker 6.0*: applying character and paragraph formatting, using the story editor, selecting large blocks of text, and moving quickly in a document.

Intermediate PageMaker 6.0: Styles is offered once.
PM201 May 17 from 9 am to noon
Fees $35/45/85

Seminars

- **No hands-on.**
- **Limited enrollment.**

New ➤ **What's New with PageMaker 6.0**

This 2.5-hour slide-show will introduce many of Adobe PageMaker 6.0's new features and enhancements, including color publishing, flexible page design, printing and prepress controls, HTML conversion features, and extensive compatibility and integration with other Adobe products.

- ✦ Prerequisite: Working knowlege of PageMaker 5.0.

What's New with PageMaker 6.0 is offered once.
PM6101 April 25 from 1:30 to 4 pm.
Fees $10/15/25

Operating System Courses

- **Hands-on.**
- **Limited enrollment.**

Introductory Courses

Introduction to UNIX

This 6-hour course is a *hands-on* look at the UNIX operating system for beginners. We will discuss important commands and utilities, file system structure and manipulation, on-line help and different "flavors" of UNIX.

Introduction to UNIX is offered twice.
UN101 April 27 from 9 am to 4 pm **Sat***
UN102 May 16, 17 from 2 to 4 pm
Fees $35/65/150
* Saturday class, with a lunch break from noon to 1 pm.

PC/Compatible Courses

- **Hands-on. Limited enrollment.**
- **All classes are taught under DOS 6.**

General

Introduction to DOS 6.x

This 6-hour class is for new users of PC/MS-DOS versions 3 or above. Mastery of the skills covered in this class is a prerequisite for all our other IBM classes. You will be introduced to four basic hardware components: the central processing unit, memory, input/output, and auxiliary storage. You will learn how DOS, your disk operating system software, manages these hardware components and allows you to interact directly with your computer.

You will learn DOS commands that enable you to
- prepare a floppy disk for use
- name a disk
- create text files
- name and organize files according to file type
- copy files from one disk to another and
- set the date and time in your computer's system clock.

You will learn how to use DOS commands to move between your floppy drive and hard drive. You will
- organize the files on a disk by creating subdirectories
- create nested subdirectories
- move from one subdirectory to another
- remove subdirectories
- display your subdirectories on the screen and
- copy this information to a file that can be printed out.

Finally, you will learn to create a basic batch file, a file that will automatically execute a group of DOS commands.

Introduction to DOS is taught over three days and is offered three times.
DOS101 April 2, 3, 4 from 2 to 4 pm
DOS102 April 22, 24, 26 from 2 to 4 pm
DOS103 May 13, 15, 17 from 2 to 4 pm
Fees $45/65/100.

Mouse Techniques

If you are not experienced at using a mouse and you plan to take a class for which mouse experience is a prerequisite, take this class first! It is very difficult to keep up with everyone else in a class such as *Word for Windows* when you are struggling to use the mouse, let alone understand *Word for Windows.*

Mouse Techniques is offered three times.
MT101 April 2 from 11 am to noon
MT102 April 15 from 11 am to noon
MT103 April 30 from 11 am to noon
Fees $5/10/25

Introduction to Microsoft Windows 3.1

This 4-hour class is an overview of Windows 3.1. In this class, you will learn how to: manipulate multiple windows; create and modify groups of applications in the program manager; run and switch between applications; change Windows settings using the Control Panel; and manipulate files, directories and disks with the File Manager.

- ✦ Prerequisite: mastery of *Introduction to DOS.*
- ✦ Prerequisite: mastery of *Mouse Techniques.*

Introduction to Microsoft Windows is taught over two days and is offered three times.
WIN101 April 3, 5 from 10 to noon
WIN102 April 17, 19 from 10 to noon
WIN103 May 1, 3 from 10 to noon
Fees *$35/45/80
* *Fee and Workbook Notice:* The fee includes the cost of a workbook. You will get the workbook in class.

Windows 95

An introduction to Microsoft Windows 95. Explore the new desktop, graphical interface, and features of windows 95. Cover the new diagnostic and tuning tools to get the most out of your windows 95 workstation.

- ✦ Prerequisite: mastery of *Mouse Techniques.*
- ✦ Prerequisite: mastery of *Introduction to DOS.*
- ✦ Prerequisite: mastery of *Introduction to Microsoft Windows 3.1 or Macintosh Fundamentals.*

Windows 95 is taught over two days and is offered twice.
W95101 April 30, May 2 from 1 to 4 pm
W95102 May 14, 16 from 1 to 4 pm
Fees* $45/65/120
* *Fee and Workbook Notice:* The fee includes the cost of a workbook, which will be distributed at the first day of class.

PC/Compatible Courses

Word Processing

Introductory Courses

Introduction to WordPerfect 6.1 for Windows

This class is designed for new WordPerfect users or people that are new to WordPerfect for Windows. In it only the basics of word processing are covered and a complete explanation is given about all the parts of the WordPerfect window. During the class you will enter text, save and close documents, exit WordPerfect and access WordPerfect help. You will also be shown the basics of formatting, working with blocks of text and how to use WordPerfect tools such as the speller and thesaurus. **Prior experience using a PC/Compatible is required.**

- ✦ Prerequisite: mastery of *Mouse Techniques.*
- ✦ Prerequisite: mastery of *Introduction to Microsoft Windows.*

Introduction to WordPerfect for Windows is taught over three days and is offered once.
WPW101 April 8, 10, 12 from 10 to noon
Fees* $70/85/120

* *Fee and Workbook Notice:* The fee includes the cost of a workbook, which will be distributed at the first day of class.

Introduction to Microsoft Word 6.0 for Windows

This 6-hour class is for users new to Word 6.0 for Windows. You will use character and paragraph formatting and move blocks of text. In addition, you will learn how to: move quickly through your documents; manipulate multiple windows; set margins, indents, page numbers, headers and footers; use the spelling checker; and preview your work. You will also learn "drag and drop" and how to use the Standard and Formatting toolbars.

- ✦ Prerequisite: mastery of *Mouse Techniques.*
- ✦ Prerequisite: mastery of *Introduction to Microsoft Windows.*

Introduction to Microsoft Word for Windows is taught over three days and is offered once.
WDW101 April 29, May 1, 3 from 2 to 4 pm
Fees $45/65/120

Intermediate Courses

Intermediate Word 6.0 for Windows: Document Formatting

This class covers the options available in Word's Section and Document formatting dialog boxes. In this 3-hour class you will learn how to divide a document into sections; allow space for binding; add headers and footers to a document; create a multiple-column format; and insert footnotes.

- ✦ Prerequisites: mastery of skills covered in *Introduction to Word for Windows*: especially knowing how to move through files quickly and how to select text.

Intermediate Word for Windows: Document Formatting is offered once.
WDWD201 May 14 from 9 am to noon
Fees $35/45/85

Intermediate Word 6.0 for Windows: Paragraph Formatting

Expand your Paragraph formatting knowledge beyond the information covered in the *Introduction to Word* class. In this 6-hour class, you will learn how to set tabs, vertical lines, and tab leader characters; control line spacing and page breaks; add white space between paragraphs and borders around text; and transform the first character or word into a drop cap.

- ✦ Prerequisites: mastery of skills covered in *Introduction to Word for Windows*: applying character and paragraph formatting, selecting text, and moving quickly through files.

Intermediate Word for Windows: Paragraph Formatting is taught over two days and is offered once.
WDWP201 May 7, 9 from 9 to noon
Fees $45/65/120

PC/Compatible Courses

Intermediate Word 6.0 for Windows: Tables

The Table feature lets you create columns of text, numbers, or graphics within your document. You can use the Table feature to create simple tabular layouts, such as a two-column list, or more complex page designs, such as business forms or scripts for plays. In this 3-hour class, you will learn how to create, modify, and format a table structure; format table cells; convert text to a table or a table to text; add lines to the table grid and shading to cells.

- ✦ Prerequisites: mastery of skills covered in *Introduction to Word for Windows*: applying character and paragraph formatting, selecting text, and moving quickly through files.

Intermediate Word for Windows: Tables is offered once.
WDWT201 May 24 from 9 to noon
Fees $35/45/85

Intermediate Word 6.0 for Windows: Beginning Merge Documents

Learn the basics of merging files using Word for Windows 6.0. In this class you will learn how to set up both data and main documents and how to merge the two. You will also learn how to select specific records to use when merging. During the class you will create data and main documents which could be used to produce envelopes, labels and letters.

- ✦ Prerequisites: mastery of skills covered in *Introduction to Word for Windows*: applying character and paragraph formatting, selecting text, and moving quickly through files.

Intermediate Word for Windows: Beginning Merge Documents is offered once.
WDWM201 May 16 from 9:30 to noon
Fees $35/45/85

Database

Introductory Courses

New ➤ Introduction to FileMaker Pro 3.0 for Windows

This 5-hour class covers basic concepts of database management. You will learn how to create a database and how to enter data; find, change and sort information; and design simple reports and mailing labels.

- ✦ Prerequisite: mastery of *Mouse Techniques.*
- ✦ Prerequisite: mastery of *Introduction to Window 95s.*

Introduction to FileMaker Pro 3.0 for Windows is taught over two days and is offered once.
FMW101 April 23, 25 from 1:30 to 4 pm
Fees $45/55/100

Introduction to Access for Windows

The basic concepts of Access relational database management are covered in this 6-hour class. Learn how to build your own Access database by creating tables, defining relationships, designing forms and reports, and working with queries and dynasets. Fundamentals of data entry, retrieval and manipulation will be explained.

- ✦ Prerequisite: mastery of *Mouse Techniques.*
- ✦ Prerequisite: mastery of *Introduction to Windows 95.*

Introduction to Access for Windows is taught over two days and is offered twice.
AW101 April 8, 10, 12 from 2 to 4 pm
AW102 May 6, 8, 10 from 10 to noon
Fees $45/55/100

Introduction to FoxPro

Learn the basics of FoxPro for Windows. In the class you will learn to create a database and how to enter, change, and search the data. You will also learn how to calculate, sort, group, and index your data in order to produce meaningful reports.

- ✦ Prerequisite: mastery of *Mouse Techniques.*
- ✦ Prerequisite: mastery of *Introduction to Windows.*

Introduction to FoxPro is taught over two days and is offered once.
FOXW101 May 7, 9 from 1:30 to 4 pm
Fees* $69/70/124

* *Fee and Workbook Notice:* The fee includes the cost of workbooks, which will be distributed at the first day of class.

PC/Compatible Courses

Intermediate Courses

Intermediate FileMaker Pro 2.1 for Windows

This 5-hour class covers more advanced topics such as columnar reports with subtotals, lookup files, calculations, and scripting.

- Prerequisite: mastery of *Mouse Techniques.*
- Prerequisite: mastery of *Introduction to Microsoft Windows.*
- Prerequisite: mastery of *FileMaker Pro for Windows.*

Intermediate FileMaker Pro 2.1 for Windows is taught over two days and is offered once.
FMW101 May 28, 30 from 9:30 to noon
Fees $45/55/100

New ➤ Intermediate Access: Using Queries

Learn how to create simple as well as multi-tabular queries. This 2-hour course starts with an explanation of Access graphical Query-By-Example query builder, and using selection queries as a basis for more advanced query techniques. Action queries will also be discussed.

- Prerequisite: mastery of *Introduction to Microsoft Access* or comparable knowledge.
- Prerequisite: mastery of *Relational Databases: Basics and Design.*

Intermediate Access: Using Queries is offered Once.
AUQ101 May 21 from 10 to noon
Fees $30/$40/$80

New ➤ Intermediate Access: Advanced Forms and Reports

This 2-hour course will focus on the creation of complex forms and reports, such as those based on multi-tabular queries, subforms and subreports, and control and option groups. Sorting and grouping functions of reports will also be covered.

- Prerequisite: mastery of *Introduction to Microsoft Access* or comparable knowledge.
- Prerequisite: mastery of *Relational Databases: Basics and Design.*

Intermediate Access: Advanced Forms and Reports is offered once.
AFR101 May 29 from 10 to noon
Fees $30/$40/$80

New ➤ Intermediate Access: Using Macros

This 2-hour course will teach you how to create and edit macros in Microsoft Access using the macro builder. Automating tasks on startup, customizing menus and menu commands, and simplifying repetitive tasks will be covered.

- Prerequisite: mastery of *Introduction to Microsoft Access* or comparable knowledge.
- Prerequisite: mastery of *Relational Databases: Basics and Design.*

Intermediate Access: Using Macros is offered once.
AUM101 May 31 from 10 to noon
Fees $30/$40/$80

Spreadsheets

Introductory Courses

Introduction to Spreadsheets (using Excel 5.0)

This 1.5-hour class is for those who have never seen or used a spreadsheet before. You will learn about components of a worksheet, how to enter and edit data, how to move around the spreadsheet, and how to open and close files. The ability to do these tasks quickly is required for all other Excel classes.

- Prerequisite: mastery of *Mouse Techniques.*
- Prerequisite: mastery of *Introduction to Microsoft Windows.*

Introduction to Spreadsheets is offered twice.
EXW101 April 15 from 2:30 to 4 pm
EXW102 May 6 from 2:30 to 4 pm
Fees $10/$15/$25

Excel Basics

In this 5-hour class you will create several spreadsheets with formulas and functions. Topics include formatting, relative and absolute addressing, copying and pasting, split screens, and print preview.

- Prerequisite: mastery of *Introduction to Spreadsheets.*

Excel Basics is taught over two days and is offered twice
EXWB101 April 17, 19 from 1:30 to 4 pm
EXWB102 May 8, 10 from 1:30 to 4 pm
Fees $45/55/100

PC/Compatible Courses

Intermediate Courses

Intermediate Excel 5.0 Topics: Charts

This 1.5-hour, hands-on class covers manipulating charts to fine-tune their appearance. Learn how to: modify the scale and markings of axes; change the appearance and content of text in a chart; use colors and styles other than a chart's defaults; and add and modify data series in a chart.

- ✦ Prerequisite: mastery of *Excel Basics.*

Intermediate Excel Topics: Charts is offered once.
EX201 May 22 from 10:30 to noon
Fees S30/40/80

New➤ Excel Macros Using Visual BASIC

This 9-hour class is an introduction to writing Excel macros using Visual BASIC for Applications. No prior experience using Visual BASIC or Excel macros is required; however, you should be familar with fundamental concepts of computer programming.

- ✦ Prerequisite: mastery of *Introduction to Microsoft Windows.*
- ✦ Prerequisite: mastery of *Excel Basics.*
- ✦ Prerequisite: programming experience.

Excel Macros Using Visual BASIC is taught over three days and is offered once.
EXVB101 April 22, 24, 26 from 9:00 to noon
Fees S45/65/120

Presentation

Introductory Courses

New➤ Introduction to PowerPoint

This class is intended for people who have not used or have very little knowledge of PowerPoint. The first hour of the class will be spent showing how to draw and edit objects in Power Point. During the rest of the class you will be shown how to work in PowerPoint different views, enter slide titles and text, and how to use PowerPoint's Wizards and Templates. By the end of class you will know how to create and edit a presentation.

- ✦ Prerequisite: mastery of *Mouse Techniques.*
- ✦ Prerequisite: mastery of *Introduction to Microsoft Windows.*

Introduction to PowerPoint is taught over two days and offered once.
PP101 May 29, 30 from 2 to 4 pm
Fees S45/55/100

Seminars

- **No hands-on.**
- **Limited enrollment.**

Understanding DOS Memory

A 2-hour overview of the three types of DOS memory, conventional, extended, and expanded. The discussion includes: differences in memory organization; how to set up the DOS memory managers; how to optimize memory.

- ✦ Prerequisite: mastery of *Introduction to DOS* or a working knowledge of DOS commands.

Understanding DOS Memory is offered once.
DOSM201 May 1 from 2 to 4 pm
Fees S10/15/25.

New➤ Relational Database Basics and Design

This 2.5-hour class will introduce you to relational database design. Relational databases allow you to develop more robust databases, and ease maintenance by reducing duplication of information. During this class you will be shown how to use the information you start with to answer the questions you have. As a class, you will and have an opportunity to design a relational database system from start to finish.

- ✦ Prerequisite: mastery of *Introduction to FileMaker Pro*, *Introduction to Microsoft Access* and a working knowledge of DOS commands.

Relational Database Basics and Design is offered once.
RDBD201 May 17 from 9:30 to noon
Fees S10/15/25.

digital Media CENTER

Multimedia Training

Registration is required for all classes. Be sure to check your registration confirmation for class location.

Macintosh Courses

- **Hands-on.**
- **Limited enrollment.**
- **Priority registration for faculty unless otherwise noted. (Students and staff working on faculty projects are also given priority. Faculty must register for students and staff.) See pages 12-13 for sections without priority registration.**

Authoring Courses

Writing World-Wide Web Documents: Introduction to HTML Authoring (Faculty)

The hypertext markup language (HTML) is used to create documents that can be read by World-Wide Web (WWW) clients. In this hands-on class you will learn to create WWW documents on a Macintosh platform. This class focuses on HTML 2.0. Topics covered are:

- HTML formatting directives
- Placing links in documents
- Including images and sounds in HTML documents
- Checking the validity of your HTML code
- A discussion of new HTML features such as tables

- ✦ Prior experience using a Macintosh is required.
- ✦ No previous HTML experience is assumed. You should, however, be familiar with using a WWW client to browse the Web.

Writing World-Wide Web Documents: Introduction to HTML Authoring is taught over two days and is offered once.
DMC101 May 8, 10 from 9 am to noon
Faculty fee is $50.

New ➤ Adobe PageMill

See page 5 of this bulletin for the Adobe PageMill class description.

Introduction to Macromedia Director (Faculty)

This 5-hour class is for experienced Macintosh users who want to learn how to use Director to author multimedia materials. During the class, you'll create a basic multimedia presentation containing text, graphics, animation, and sound.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of basic Macintosh drawing and painting programs.

Introduction to Macromedia Director is taught over two days and is offered once.
DMC102 April 23, 25 from 1:30 to 4 pm
Faculty fee is $55.

Introduction to Macromedia Authorware (Faculty)

This 5-hour class is for experienced Macintosh users who want to learn how to use Authorware to author multimedia materials. During the class, you'll create a basic multimedia presentation containing text, graphics, animation, and sound.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of basic Macintosh drawing and painting programs.

Introduction to Macromedia Authorware is taught over two days and is offered once.
DMC103 May 14, 16 from 1:30 to 4 pm
Faculty fee is $55.

Graphics Courses

Scanning with PhotoShop (Faculty)

In this 3-hour class you will learn the procedure for scanning photographs using the Apple One Scanner. We'll apply color correction techniques to the scanned images and compare the results. Bring one small color photo of your choice not larger than 4 x 6" for practice.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of basic Macintosh drawing and painting programs.

Scanning with PhotoShop is offered once.
DMC104 April 30 from 1 to 4 pm
Faculty fee is $40.

PhotoShop Basics (Faculty)

This 6-hour class is intended for the beginning PhotoShop user. We will focus on the basic concepts, basic selecting techniques, and color correction. You will learn to use the toolbox and palettes to create a composite image.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of basic Macintosh drawing and painting programs.

PhotoShop Basics is taught over two days and is offered once.
DMC105 May 21, 23 from 1 to 4 pm
Faculty fee is $65.

Selecting with PhotoShop (Faculty)

This 6-hour class is intended for people who have used PhotoShop and are familiar with the basic concepts and using the marquis and lasso tools for selecting. We will work with all selection techniques including masks. You will also learn to use layers and text.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*
- ✦ Prerequisite: mastery of basic Macintosh drawing and painting programs.
- ✦ Prerequisite: *PhotoShop Basics.*

Selecting with PhotoShop is taught over two days and is offered once.
DMC106 May 29, 31 from 9 am to noon
Faculty fee is $65.

Digital Video Courses

New ➤ Introduction to Digital Video (Faculty)

In this 5-hour class you'll learn the basic procedure for digitizing video. You'll practice creating a QuickTime movie by capturing a video clip and cutting unwanted audio and video from the clip.

- ✦ Prerequisite: mastery of *Mac Fundamentals.*

Introduction to Digital Video is taught over two days and is offered once.
DMC107 June 4, 6 from 1:30 to 4 pm
Faculty fee is $55.

New ➤ Introduction to QuickTime VR (Faculty)

This 5-hour class is for advanced Macintosh users who want a hands-on introduction to Apple's QuickTime VR technology. During this class, you'll use the Apple QuickTake camera to create QuickTime VR panoramas. **Due to the advanced experience level required for this class, permission from the instructor is required to register.**

Introduction to QuickTime VR is taught over two days and is offered once.
DMC108 June 5, 7 from 9 to 11:30 am
Faculty fee is $55.

PC/Compatible Courses

- **Hands-on.**
- **Limited enrollment.**
- **Priority registration for faculty unless otherwise noted. (Students and staff working on faculty projects are also given priority. Faculty must register for students and staff.)**

New ➤ Introduction to Asymetrix Multimedia ToolBook (Faculty)

This 6-hour class is a hands-on introduction to authoring multimedia lessons and presentations using Multimedia ToolBook. You'll learn how to begin building multimedia applications that incorporate graphics, animation, audio, and video.

✦ Prerequisite: mastery of *Introduction to Microsoft Windows.*

Introduction to Asymetrix Multimedia ToolBook is taught over two days and is offered once.
DMC109 May 22, 24 from 1 to 4 pm
Faculty fee is $90.

* *Fee and Workbook Notice:* The fee includes the cost of a workbook, which will be distributed at the first class.

Seminars

- **No hands-on.**
- **Limited enrollment.**
- **Priority registration for faculty unless otherwise noted. (Students and staff working on faculty projects are also given priority. Faculty must register for students and staff.)**
- **No fees.**

Registration is required for all classes. Be sure to check your registration confirmation for class location.

Exploring Learning Communities using Multimedia and Internet Tools (Faculty)

This seminar will discuss the possibilities of using multimedia and Internet tools to design learning communities that promote active learning, collaboration, and interaction between students, faculty, and the Internet community. We'll discuss using Internet tools to extend the classroom and expand opportunities for learning and interaction. We'll look at many examples, including four University of Minnesota courses that use multimedia and Internet tools.

There will be time during the seminar to discuss your needs for redesigning existing courses to incorporate multimedia and Internet tools.

Exploring Learning Communities using Multimedia and Internet Tools is offered once.
DMC110 May 2 from 1:30 to 4 pm

Changed ➤ Interface Design for Multimedia (Faculty)

This 2.5-hour seminar offers guidelines on how to make your multimedia product visually pleasing and stimulating to the user. Interface concepts, interface elements, and interface animation are some of the topics to be covered.

Interface Design for Multimedia is offered once.
DMC111 May 15 from 1:30 to 4 pm

Brown Bag Seminars

These 1-hour seminars are offered during the noon hour. You are welcome to bring your lunch.

New ➤ Multimedia Intellectual Property: Copyright Resources on the Internet (Faculty)

Keeping up with the intellectual property issues associated with developing multimedia materials can be a difficult task. In this 1-hour seminar, we'll discuss how to search the World-Wide Web for the latest copyright information and explore some of the best sites found.

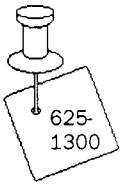
Multimedia Intellectual Property: Copyright Resources on the Internet is offered once.
DMC112 May 9 from noon to 1 pm

New ➤ Multimedia Development: Resources on the Internet (Faculty)

Many resources exist on the Internet to aid you in the development of multimedia materials. In this 1-hour seminar, you'll learn how to find and take advantage of Internet information resources such as listservs, online newsletters, and online technical support. You'll also learn how to find software updates, demonstration files, and tutorials on the Internet.

Multimedia Development: Resources on the Internet is offered once.
DMC113 April 15 from noon to 1 pm

Self-Paced Training



If you can't attend one of our scheduled training classes, or prefer to learn on your own, you can use software training packages and equipment in one of our self-paced training centers or check out training packages to use with your own equipment.

Training Centers

Computer and Information Services has self-paced training centers on the Minneapolis and St. Paul campuses. They are equipped with hardware, software, and a select number of training materials. The centers are available to University faculty, staff, and students. Training materials at these centers are for use in the center only, and may not be checked out. Since the collection at each center is limited, you may check out additional packages at the Computer and Information Services office in 190 Shepherd Labs (625-1300).

Equipment

The training centers are located in 1 Nicholson Hall and 58 Biological Science Center and each have the following equipment:

- VCR and TV
- audio cassette player
- Macintosh
- IBM-compatible

Hours

Both training centers are open Monday through Friday and closed on weekends.

Location	Hours
1 Nicholson	8 am to 6 pm
58 Bio Sci Ctr	Call for reservation

Reservation Policy

To use the training materials available in 1 Nicholson and 58 Biological Sciences, call 625-1300 for reservations. Without prior reservation we cannot guarantee the availability of the training facilities. Each location will have a list of materials available. To reserve training materials not available at a training center, call 625-1300. **You may take out only one package at a time for 48 hours.**

Training Packages

We have software training packages for the software listed below. A complete list, with descriptions, is available in 190 Shepherd Labs. The packages have audio tapes, video tapes, or disk-based training tutorials. A complete list is available in our office in 190 Shepherd Labs.

There is no fee for using these packages, and you may check them out for 48 hours. However, before you can check them out, you must sign a *Usage Agreement* and leave your University of Minnesota ID with us. We will return your ID when you return the training materials. Unless you use our self-paced training centers, you must supply your own equipment and software.

Generally DOS and Windows training software is available on 5.25-inch 360K and 3.5-inch 720K disks; Macintosh training materials on 800K.

Current Training Materials

Networking/Languages/Other
C++
Database Management
NetWare 4.0
Network Concepts/Networking
Novell
Objects
ObjectVision
ObjectWindows
Turbo Pascal
Visual Basic Programming

PC-DOS/Windows
Access 2.0 (Win)
Allways r2.2 (DOS)
Ami Pro 2.0 (Win/DOS)
dBase III Plus/dBase IV (DOS)
dBase 5.0 (Win)
DOS 5.0, DOS 6.0
Excel 4.0, 5.0 (Win)
FoxPro 2.5 (Win/DOS)
Freehand 2.5 (Win)
Harvard Graphics 3.0/3.05 (DOS)
Harvard Graphics 2.0 (Win)
Lotus 1-2-3 (Win), Release 2 & 3 (DOS)
Lotus SmartSuite (Win)
Office 4.x (Win)
OS/2 2.0/2.1
PageMaker 4.0, 5.0 (Win/DOS)
Painter (Win)
Paradox 4.0 (Win/DOS)
PowerPoint 3.0 (Win)
Quattro Pro 3.0 (Win/DOS)
Windows 3.1/NT
Word for Windows 2.0, 6.0
WordPerfect 5.0/5.1/6.0 (DOS)
WordPerfect 5.1/5.2/6.0 (Win)
Works 2.0 (DOS)

Macintosh
4th Dimension 3.0
Apple Macintosh
Canvas 3.0
ClarisWorks 2.0
Director 4.0
Excel 3.0, 4.0, 5.0
FileMaker Pro 2.0
Font Management
FreeHand 3.0
HyperCard 2.0
Illustrator 5.0/5.5
Lotus 1-2-3
MacDraw Pro
Macintosh Basics
Macintosh Networking
Macintosh System 7.5
Mac Project Pro
MacWrite II/MacWrite Pro 1.0
Office 4.2
PageMaker 4.0/4.2/5.0
Painter 3.0
Paints and Draws
Persuasion 2.0/3.0
PhotoShop 3.0
PowerBook
PowerPoint 4.0
Premiere 3.0
QuarkXPress 3.0/3.1
Quicken 4.0
QuickTime 1.6
Resolve
System 7.0/7.5
Word 5.1/6.0
WordPerfect 2.1
Works 2.0/3.0

Computing and Information Technologies

Distributed Systems: Microcomputers, Workstations, LANs

Software, hardware, peripherals, local area networks ..... 626-4276 ..... M-F ..... 9 am to 4 pm
- East Bank ..... 152 Shepherd Labs ..... above ..... above ..... above
- West Bank ..... 93 Blegen ..... above ..... M-F ..... 1 pm to 4 pm
- St. Paul ..... 58 Biological Sciences Center ..... above ..... M-F ..... 1 pm to 4 pm

Central Systems

These systems require a user name and password, which you get when you open an account.
Qualified users can apply for grants to cover some computing-related costs.

- EPX (UNIX), NVE (NOS/VE), UZ (Ultrix), VX and VZ (VMS) ..... 626-8366 ..... M-F ..... 9 am to 4 pm
- VM1 (IBM/CMS), 90 Coffey Hall Walk-in consulting hours ..... 624-6235 ..... M-F ..... 9-11 am, 2-4 pm

E-mail and LUMINA

- E-mail: call for help using your University account. ..... 626-7676 ..... M-F ..... 9 am to 4 pm

Forgot your password? Staff: call 626-8366. Students: go to any Computer Facility—e.g., 14 Folwell, 26 Lind, 305 McNeal, 50 HHH. Troubleshooting: If your mail server is down, you'll hear a status report at 626-1819.

General Information

Williamson Hall Book Center

Computer Department 625-3854
(inventory and prices also available on Gopher)

University Computing and Information Services

Administrative Information Svcs. (AIS) Help Desk ... 4-0555
Biomedical Graphics, various locations 6-3939
Central Computing Services, 100 LaudCF 6-1600
- Accounts, EPX, NVE (incl MEDLINE), UZ, VX, VZ .. 6-8366
- Data Entry 6-8351
- Statistics Services 5-2303

Computer Facilities, (also call individual facilities) . 5-1300
_FolH 5-4896_Lind 6-0856_McN 4-5367_HHH 4-6526/+ more
Digital Media Center
- Development Suite for Faculty, 15 Walter Libr. 5-5055

Disability and Computing Services, voice/TTY 6-0365
Distributed Computing, 190 Shep Labs 5-1300
Engineering Services, 103 LaudCF 5-1595
- Equipment Repair and Warranties 5-1595

Gopher Hotel (server setup for a fee) 5-2303
Kodak Printer Service 6-1661
St. Paul Computing, VM1 Accounts, 50 Coffey Hall 4-7788
Software Services (contract programming) 5-2303
Statistical Support
- SAS 4-3330
- SPSS, BMDP, Minitab on VAX or EPX 6-8366

Supercomputer Center Help, 3030 SCC 6-0808
Telecommunications, 30 TelecomB
- Networking Services Information 6-7800
- Networking Services Repair 5-0006

Training, Course Registration, 190 ShepLab 5-1300
University Libraries, Integrated Information Center . 4-2020
University Networking Services, 130 Lind 5-8888
Workstation Support Group, 98/99 Coffey
- IBM AIX, HPUX, IRIX, SOLARIS, SUNOS 4-7486

Associate Vice President for Academic Affairs and Acting Director of Information Technology

Donald R. Riley, Professor 626-9816

Access Information

SLIP: 2400/14,400 ——— 626-1920
SLIP: 14,400/28,800 ——— 627-4250
SLIP: ADI-100 and ITE (with MKO) ——— 623-0291

Terminal settings for these systems are 8-1-N (8 data bits, 1 stop bit, no parity) unless otherwise noted. The number you dial may depend on the modem's bps or baud rate.

Internet addresses.

Dial-in Server: 626-0300, -1200, -2400, -4800, -9600

At 9600 Telecomm supports V.32 and MNP level 5 error correction.

On campus ADI-100 and ITE setups use 626-2400.

LUMINA: 300/1200/2400 625-6009
- V.32 4-7539
- Telnet & TN3270 ..... PUBINFO.AIS.UMN.EDU

Gopher, alternate access (log in as gopher)
- 300, 1200, 2400, 9600 ..... see *Dial-in Server*
- _____ CONSULTANT.MICRO.UMN.EDU

Help by E-mail for POPmail or Gopher or Slip or Minuet Format _____ NAME@BOOBMBOX.MICRO.UMN.EDU

AIS SecureID V.32 _____ 626-1061
- 300/1200/2400 _____ 6-7770
- tn3270 & Telnet _____ PUBINFO.AIS.UMN.EDU

EPX, NVE, UZ, VX, VZ 300-9600 __see *Dial-in Server*
- EPX or UZ or VX or VZ or NVE.CIS.UMN.EDU

EPX, NVE: 300/1200/2400 625-1445
- up to 19.2 campus data phone 6-2400

VM1 (IBM/CMS) at 7-1-even
- 9600 624-3668
- 1200/2400 & <19.2 campus data phone .. 4-4220
- _____ VM1.SPCS.UMN.EDU

News Server ..... NEWS.TC>UMN.EDU
Fax via E-mail (note John.Doe & 9-9999 are examples)
/pn=John.Doe/dd.fax=9.9999/@fax.tc.umn.edu
U of Minnesota Web ..... http://www.tc.umn.edu/
Distributed COmputing http://www.micro.tc.umn.edu/
Central Computing ..... http://www.umn.edu/ccs

Student/Staff ID # or Social Security #:

Required for registration.

Academic & Distributed Computing Services
Short Course Registration

___ Student ___ Staff/Faculty ___ Other

Name	Department Name (if applicable)
Address	Work Phone
	Home Phone

Please note: Some classes require previous experience. Before registering for a course, please check its description in the Short Course Bulletin for any prerequisites. Instructors assume that all registrants meet the stated prerequisites.

Class Code	Class Title	Date and Time	Fees

For Office Use Only

Reg. By: Date: **Total Fees:** Payment by: ☐Cash ☐Check ☐IV _____

Academic and Distributed Computing Services
University of Minnesota
Room 190, Shepherd Labs
100 Union Street SE
Minneapolis, MN 55455-0421

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