
S T . P A U L C O M P U T E R C E N T E R

S P R I N G S H O R T C O U R S E S

The St. Paul Computer Center will be offering short courses during the Spring Quarter. The User Orientation presentation introduces new and prospective users to the SPCC facility. Following a brief description of the hardware and software available at SPCC, a short tour of the Computer Center will be given.

The SAS course will cover the Statistical Analysis System (SAS), a comprehensive statistical package available on the IBM 4341 computer at SPCC. In addition to statistics, SAS provides software tools for data storage and retrieval, report writing, general programming, and graphics. Those people intending to use SAS from either MUSIC or CMS should be familiar with the respective system before attending the SAS course. A computer-based training package for SAS will be part of the course. Users not attending the short course may also have access to this self-study course. Those interested should obtain the handout named "Using CBT for SAS".

The CMS course will introduce the Conversational Monitor System, an operating system that allows one to edit and save files, submit batch jobs, and run jobs interactively. SAS and NOMAD (a data base management system) may be accessed interactively through CMS.

The NOMAD demo introduces a Data Base Management System now available at SPCC. NOMAD is a fourth generation language, which may be used for data management, retrievals, application programming, report writing, and graphics. This demo will emphasize database description and organization using NOMAD2 syntax.

The CMS SCRIPT course will present the basic features of SCRIPT, a text formatting language that allows you to prepare finished typed material such as letters, reports, manuscripts and other similar documents. You can specify that the text will be single or double spaced, right or left justified. SCRIPT can automatically insert page numbers and headings as well as do footnotes. Only SCRIPT for CMS will be covered in this short course. Users interested in this course should be familiar with CMS.

The first hour of the SAS, CMS, and SCRIPT short courses is lecture, and the second hour is a terminal session in which the students may apply what they have just learned. All courses will be offered on the St. Paul Campus.

The short course schedule for the Spring Quarter is as follows:

SHORT COURSE NAME	DATE	TIME
User Orientation	Apr 4 (Th)	3:00-5:00
Introduction to CMS	Apr 8,10,12 (M,W,F)	3:00-5:00
SAS (Statistical Analysis System)	Apr 16,18,23 (T,TH,T)	3:00-5:00
Introduction to NOMAD	Apr 19 (F)	2:30-5:00
Introduction to CMS	Apr 30 (T,TH,T)	3:00-5:00
	May 2, 7	
SAS (Statistical Analysis System)	May 9,14,16 (Th,T,Th)	3:00-5:00
Introduction to CMS SCRIPT	Apr 22,24 (M,W)	3:00-5:00

The User Orientation will be held in B45 COB (St. Paul Campus), with no registration required. To register for the other courses, please obtain and complete a short

S T . P A U L C O M P U T E R C E N T E R

course registration form from SPCC (373-0987; 50 Coffey Hall). Return it to the Main Office, 50 Coffey Hall, prior to the start of the class. Most short courses have a modest fee associated with them and require full payment before the class begins. Sorry, no refunds are made after the class begins.

If you have questions about short courses, their cost, or registration, please call Mel Sauve or Diane Suski (373-0987).

If you have a group of 6 or more people interested in any of the short courses, SPCC can schedule a class just for your group. Please contact Mel Sauve at 373-0987 to make the necessary arrangements.

M I C R O N O T E S

St. Paul Campus Microcomputer Laboratory

The St. Paul Campus now has a microcomputer laboratory available for use by University students, faculty, and staff. The lab is located on the lower level of the campus library (Room B50). To gain admittance requires a "Micro Lab Access" card. The cost of the card is \$10.00 per quarter and, with appropriate ID, may be purchased through the cashiers office in Coffey Hall.

Spring Quarter Hours

Monday-Thursday
8:00AM-8:00PM

Friday
8:00AM-5:00PM

Saturday
12:00 Noon-4:30PM

Note: There will be regular hours through March 23, 1985.
The Lab will be closed Monday, March 25, 1985 and Saturday, March 30, 1985.
The hours for Tuesday-Friday, March 26-29 will be 9:00 AM to 4:00 PM.
Regular hours will resume April 1, 1985.

Lab attendants will be present to sign out the software disks and manuals that are available for use in the lab. An instructor may use the lab attendants to distribute any class disks to students and collect the assignments. The lab may be reserved by class instructors for two or three class periods during a quarter. To reserve the lab, if you have any questions, or need further details, call Karen Brindle at 373-0987.

The lab is equipped with the following hardware and software:

13 IBM-PC's	4 Apple IIe's	4 Macintoshes
2 Disk Drives	2 Disk Drives	1 Disk Drive
256k Memory	128k Memory	512k Memory
Wordstar	Appleworks	MacPaint
Lotus 1-2-3		MacWrite
dBase III		MacChart
Minitab		Multiplan
Basic		Basic
Superfile		

Users will be responsible for obtaining their own work disks.

We hope that you will use the lab and will also help to inform students of it's availability.

Uploading and Downloading Equipment

SPCC will be installing a specially equipped IBM PC in 90 Coffey Hall from which users may transfer data between IBM PC (or other MS-DOS machine) diskettes and CMS. The preliminary testing of this equipment indicates that it can transmit data at a much faster rate and with more reliability than can be achieved using asynchronous communications over the phone lines. Please look for an announcement when this service is made available to the user public.

CMS NOTES

Profile Exec

An EXEC is a file with a filetype of EXEC. It contains a series of commands that are executed when you enter the filename of the EXEC file.

A special EXEC provided to all new userids is the PROFILE EXEC. It is automatically executed at the start of a terminal session or whenever an IPL CMS command is issued. The standard PROFILE EXEC at SPCC executes an EXEC called USERPROF EXEC. The USERPROF EXEC establishes an operating environment which is standard at SPCC. Many commands are not accessible until after USERPROF is executed.

The following lines are in the standard PROFILE EXEC:

```
&TRACE OFF
EXEC USERPROF
&EXIT
```

If you accidentally erase your PROFILE EXEC, you may XEDIT a file with that name on your A disk and file it. To have the PROFILE executed during the current terminal session (i.e., if you had erased it during a previous session), type in the name of the EXEC (PROFILE).

You may add commands to the PROFILE EXEC to further tailor your CMS environment (e.g., settings for special characters and PF keys for your terminal, requests to link to special disks, or requests to query your virtual unit record devices among other things). If you do add statements to the PROFILE EXEC, do not delete the EXEC USERPROF statement, and add commands following this statement.

Help file system

CMS provides an online HELP facility for users. The HELP facility uses XEDIT to display HELP files. The HELP facility may be used from both Full Screen terminals and Line at a Time type terminals. The documentation presented by the HELP facility is the same as given in the IBM publications.

Use the HELP command to enter the HELP facility.

The format of the HELP command is:

Help Help
 Message
 MENU
 component MENU
 component <name <options

Where:

HELP displays information on how to use the HELP facility. HELP HELP displays a description of the function of the HELP command, its syntax, keywords, operands, and options.

message is the 7 character message id to specify to display the HELP file for a message. Specify the message id in the form xxxnnt where

xxx indicates the component (DMS for CMS messages, DMK for CP messages)
nnn is the message number
t is the message type

For example:

If the following message is received DMSHLP250S, the correct entry would be DMS250S.

Menu displays a list of component menus available. MENU is the default if no paramters are specified.

component is the name of the component you want information about. The HELP facility has the following components:

CMS	CMS commands
CP	CP commands
DEBUG	CMS DEBUG subcommands
EDIT	CMS EDIT subcommands
EXEC	CMS EXEC commands
EXEC2	EXEC2 commands
XEDIT	XEDIT subcommands
REXX	System Product interpreter Statements

component menu

displays the menu of HELP files available for the specified component.
For example:

help cms menu

component name

displays the HELP file for the specified command, subcommand or statement.
If a component is not specified, CMS is assumed.

Some examples:

1. HELP DMK003E or HELP MSG DMK003E

To request the HELP file for the message DMKCVS003E.

2. HELP CP MENU

To request the menu of CP commands.

3. HELP PRINT

To request information on the CMS PRINT command.

If you are using the HELP facility from a Full Screen terminal you may position the cursor on any character of the menu screen that you want HELP on and press PFl, you will be taken into the HELP file for that command or statement. If you are using a Line at a Time terminal you must enter each HELP command from the command line.

Parts of this note are from CMS User's Guide (Release 3).

New and Revised Documentation

The Beginners Guide to CMS for Line at a Time Terminals and for Full Screen Terminals have been revised and the updated copies are available in 50, Coffey Hall. The major changes reflect the changes with the installation of CMS Release 3. The SAS-BATCH examples are for userids owning their SAS data set disks.

SPCC T O J O I N B I T N E T

SPCC plans to join BITNET (Because It's Time NETWORK). BITNET is an electronic network that links a large number of university and research computer systems around the U.S. and Europe via leased telephone lines. Messages and files can be transferred among the users of the BITNET subscriber systems as easily as electronic mail can be sent between SPCC users using PROFS and other CMS facilities. A CMS account will be needed to use BITNET.

Look for an announcement in the next newsletter for more information on the availability and access of BITNET.

SAS N O T E S

The LINES option in PROC ANOVA and PROC GLM

Many users have wondered about the volume of output generated when doing some multiple comparison tests with PROC ANOVA and PROC GLM. In particular, users familiar with the output from the DUNCAN option on the MEANS statement (means listed in descending order, with letters A,B,C, etc., to the left of the means indicating nonsignificant subsets), may wonder why the output is presented as confidence intervals for all pairwise differences between means.

When choosing tests BON (Bonferroni), GABRIEL, SCHEFFE, SIDAK, SMM or GT2, T or LSD, or TUKEY and when your cell sizes are unequal, the output is displayed as confidence intervals for all pairwise differences between means.

If you would rather see your multiple comparison tests presented as means in descending order with nonsignificant subsets specified, (even though your cell sizes are unequal), use the LINES option on the MEANS statement in the analysis of variance procedures.

MEANS TRT / BON LINES;

See the writeup on "Comparisons of Means" in the SAS User's Guide: Statistics pages 169-175 for further discussion of the tests and the output.

SAS Disk Migration

SAS disk migration is continuing. Each SAS user with permanent datasets will be contacted by a SPCC staff member to create a CMS minidisk and to transfer their current SAS datasets. We look forward to SPCC users' continued cooperation.

If your SAS datasets have been moved to your own CMS dataset disk, please use the LINKACC and SASBATCH NEW statements in your SASBATCH jobs. Do not go back to using the SASBATCH statement without the NEW parameter.

Two New SAS Products

SAS/FSP (Full-Screen Product) and SAS/OR (Operations Research) are now available in the current version of SAS. See the last SPCC Newsletter for a writeup on these new products.

Documentation for SAS/FSP can be found in the SAS/FSP User's Guide. The FSCALC procedure is documented in SAS Technical Report: P-133. See the SAS/OR User's Guide and Technical Report: P-134 for information about the SAS/OR procedure. SAS documentation is available in our Main Office, 50 Coffey Hall.

NOMAD2 N O T E S

The newest release of NOMAD2 (release 2.05) will be installed as the current version soon. Look for an announcement in upcoming weeks. The new release contains the following enhancements and writeups (taken from NOMAD2 2.05 Release Notes):

1. New capability of the SCREEN ALTER command
The SCREEN ALTER command will now accept expressions as the subscripts of arrays. This makes the handling of arrays with SCREEN ALTER easier and more flexible.
2. Enhancements to DBEDIT
A new command, PRINT, has been added to DBEDIT. A file called SCREEN LISTING is created when PRINT is entered on the DBEDIT command line.

DBEDIT has also been changed to better handle cases where the database is not writeable.

3. Finding the DBEDIT PERSPECT file

When the user invokes DBEDIT, the locally attached disks are searched for the appropriate PERSPECT file. If it is found, it will be used. If the PERSPECT file is not found, and there is a shared database with a matching name, the PERSPECT statement will be taken from the data base server.

4. Clarification of where NOMAD2 expects to find the Shared Database PROFILE

The PROFILE file is obtained from the database ownerid. If the PROFILE is not found by the server, access to the database is denied unless the CONTINUE option was in the SCHEMA.

5. Rules for Timeseries Array Alignment

When assigning a timeseries array from another timeseries array, or when two or more timeseries arrays are used in an expression, NOMAD2 aligns the arrays based on the indexes. The rules for the alignment are given in the documentation.

There is a new Release Notes booklet called NOMAD2 2.05 Release Notes that is available for free to users who have purchased a NOMAD2 Reference Manual.

The 2.02 Release notes are now in and are also available to users who have purchased the Reference manual. Copies of all the Release Notes are also available for reference in the User Reference Racks in 90 Coffey Hall.

D A T A E N T R Y

The turnaround time for data entry varies with the workload. Currently, an average sized job (500 - 1000 records) takes one to two weeks to complete.

Eighty column coding sheets are available at 6 North Hall.

Unless you have made special arrangements with SPCC to purchase tapes, they should be returned to data entry as soon as you are finished with them.

Help is available in preparing data or source documents (questionnaires, etc.) for the most efficient data entry.

For information about current turnaround time, cost estimates, or other questions, contact Linda or Cleo at 376-9222. Account numbers may be obtained at 50 Coffey Hall.

S T A T I S T I C A L C L I N I C

The Statistical Clinic on the St. Paul Campus, is staffed by graduate students of the School of Statistics, and supervised by faculty members of the Applied Statistics Department. The Statistical Clinic provides statistical consulting to researchers at the University of Minnesota, generally without charge. Assistance on appropriate experimental designs and methods, data analysis, and the interpretation of results are part of the mission of the Clinic.

Many statistical problems can be handled completely by the personnel in the Clinic. However, more difficult problems will be referred to an Applied Statistics faculty member.

S T . P A U L C O M P U T E R C E N T E R

The consulting hours of the Statistical Clinic, are:

Monday, Wednesday, Friday 9:00-4:30
Tuesday, Thursday 9:00-3:00

Room: 125g COB
Phone: 376-3845

R E D U C E D R A T E S F O R O F F - H O U R U S E R S

Computer processing performed after 5:00 pm daily (Monday thru Friday) and all day Saturday and Sunday receives a 25% reduction on 3 billable components: Central Processor Time, High Speed Input/Output (disk and tape), and Connect Time.

A C C E S S T O F A C I L I T I E S

ST PAUL COMPUTER CENTER

SPCC hours, locations and telephone numbers:

Main Office	: 50 Coffey Hall	373-0987	8:00 am - 4:30 pm
Users Room and	: 90 Coffey Hall		7:00 am - 11:00 pm M-F,
Computer Hours (1):	: 90 Coffey Hall		8:00 am - 4:00 pm Sat, and
	: 90 Coffey Hall		4:00 pm - 10:00 pm Sun
Help Desk	: 90 Coffey Hall	376-4602	10:00 am - 12:00 pm M-F
			1:00 pm - 4:00 pm M-Th
			1:00 pm - 3:00 pm F
Data Entry	: 6 North Hall	376-9222	8:00 am - 4:30 pm
Interactive Dialup Number:		376-5820	

(1) After hour, Saturday, and Sunday access to the Center may be achieved by using the tunnel passageway from the Student Center.

Note: SPCC will be closed Monday, March 25, 1985.

MERITSS SYSTEM CONNECTION TO SPCC

Users can now gain access to the IBM 4341 computer system at SPCC through the MERITSS System (Interactive Instructional Labs). There are now six ports dedicated to this type of communications traffic. Those wishing to utilize this type of access can obtain the handout named "Using SPCC's IBM Computer from the MERITSS System" from our Main Office (1 page, no charge).

CLASSROOM OFFICE BUILDING INTERACTIVE INSTRUCTIONAL LAB HOURS

	Doors Unlocked	Doors Locked
	-----	-----
Monday -- Friday	8:00 am	10:00 pm
Saturday	9:00 am	1:00 pm

S T. P A U L C O M P U T E R C E N T E R

Should you be the last person out of the Lab during the hours shown above, please leave the doors unlocked (SPCC personnel are responsible for locking doors at the designated times). Thank you.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age or veteran status.

WALTER LIBRARY
UNIVERSITY ARCHIVES
11 WALTER LIBRARY
MPLS CAMPUS