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Microcomputer Problem and Change Meetings Rescheduled for Tuesdays

Microcomputer problem and change meetings have been rescheduled for Tuesday mornings at 8:30 am in Room 13 of the Mitchell Building. For more information, contact Sandi or Wendy at 444-2973.

Information System Policies

The Automated Information Systems and Telecommunications sections of the Montana Operations Manual (MOM) have recently been revised and distributed to all MOM holders. Please refer to these policies for guidance in planning, acquisition, development, maintenance, security, and usage of information systems or telecommunications.

New Video on Information Security Available

The Information Center has added a 1/2" video on Information Security to its library of free check-out materials. The video is short and informative and is designed to help familiarize users of computers with potential security problems. Please call Sandi or Melanie (444-2973) to check out the video.
Microcomputer Term Contract News

As of October 31, 1988 the State of Montana has arranged to extend the term contracts for ACER and Zenith microcomputers, Okidata printers, and maintenance services for all microcomputers for a period of one year.

Some surprising good news was received from IBM on October 31, 1988. The company will extend the term contract price for four months, until February 28, 1989, to allow us time to rebid.

The term contracts for Hewlett Packard Laserjet II printers have expired. This contract was not renewed because the vendor was unwilling to renew the contract without increasing the prices.

Information Services Division will be rebidding the IBM and Hewlett Packard contracts and plans to have new contracts in place by March 1, 1989.

New price lists are available by calling the Information Center at (406) 444-2973.

The Zenith and ISC contracts are undergoing some changes due to memory and model changes. These are summarized below:

Zenith -

- Zenith has added a new Z-184 Portable PC, with 640K standard RAM, a 20Mb hard drive, and one 3.5" (720K) floppy disk drive. This unit is not expandable to 1Mb, and there is no port for a 10-key pad.

- Zenith has down-graded the Z-386 machines from standard RAM of 2Mb to 1Mb of RAM, expandable to 16Mb RAM. The price decreased $500.

- Miscellaneous additions include the Z-170 RGB Composite Video Card, the Zenith Mouse (LG-10), and three (3) modems, the ZA-170-4 (300/1200 Baud Hayes compatible modem), the ZA-181-24 (300/1200/2400 Baud Internal modem) for use with portables, and the ZM-2401 Zenith 2400 Baud modem. Also added are the ZCA-2300-EF Z-286 LP 5.25" 360K floppy disk controller, the ZCA-2300-5 Z-286 LP external 5.25" 360K floppy drive, and the ZIS-180-54 external 5.25" 360K floppy drive for use with portables.

- Under Operating Systems, Zenith has added Microsoft OS/2, version 1.0 on a choice of either 3.5" or 5.25" disks. Also available is MS-DOS version 3.3 PLUS on 3.5" or 5.25" disks.

- Additional diagnostic software and technical manuals will be added to the term contract.

While Zenith has undergone several price increases since last year, particularly in the area of memory, Zenith has agreed to maintain the same memory chip and memory expansion board prices.

Portable PC's have also increased in price, however Zenith has agreed to extend last year's prices for an additional year.
Unfortunately, Zenith discontinued all truckload sales due to low profit margins just prior to the sale in Helena. However, Zenith will exhibit their microcomputer products in Helena on November 21, 1988 in the Department of Natural Resources and Conservation Director's Conference Room. Agencies or employees may order equipment at that time.

ISC -

- The ACER PC/XT 710 768K machine has been discontinued. ISC has therefore proposed the addition of the upgraded 1Mb RAM 710 machine (for an additional $100) to the term contract. The ACER PC/AT 910 which had a 10Mhz processor has been replaced with a PC/AT 910/12. The new 910/12 is a 12Mhz machine with 8 expansion slots, no hard disk controller at an increase in price. There is also an additional upgraded PC/AT 1100/16 machine with 2Mb of 32 bit RAM on the motherboard, and a floppy controller only (no hard disk controller) for approximately $600 more.

- New models proposed for the first time include an ACER PC/AT 1100/20 Mhz machine with an 80386 processor and 2Mb RAM, an ACER PC/AT 5200 20 Mhz machine with an 80386 processor and 2Mb of RAM (recommended for use as a file server), and the ACER PC/AT 915M, which is an 80286 machine in a 710 box.
New WordPerfect Pricing Agreement

The State of Montana has just signed a Large Account Pricing Agreement (LAPA) with WordPerfect. The LAPA is not a site license but will offer the state better pricing due to our volume purchasing. We should also have a quicker turnaround time receiving WordPerfect products because we will go directly through WordPerfect instead of a third party.

Central Stores has distributed the new catalog with a partial list of WordPerfect products and prices they now carry. Each computer that uses WordPerfect must, at a minimum, purchase the WordPerfect license and template. For example, a stand-alone WordPerfect 5.0 license and template is $123.74. The manual, workbook, diskettes, binder and case all have their own part number and price and are optional purchases. If you are using WordPerfect 5.0 on a network, you would purchase the complete server package for $212.43 and then purchase the license fee for each add-on station at $32.30. For a complete price list, see the end of this article. If you have any questions concerning the new LAPA, contact Gale Kramlick at the Information Center (444-2974) or Jim Nelson at Central Stores (444-4514).

WORDPERFECT PRICE LIST

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<td>WP 5.0 Binder &amp; Case</td>
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<td>9511-1106</td>
<td>WP 5.0 Workbook</td>
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<td>165.35</td>
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<td>WP 4.2 Manual</td>
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New release of Panlink

A new release will be available soon for Panlink, our micro-mainframe link product. Installing the new release involves first replacing Panlink on all pc's and then replacing it on the mainframe. We are tentatively planning on doing the pc portion during the week of December 5th and switching over the mainframe portion December 12th. The new pc software will work with the old mainframe software so we can do it in stages like this.

The most notable improvement in the new release is the addition of the Share disk attribute. This allows for read/write access to the first user (pc or mainframe) requesting it for a particular disk. Those of you who have been frustrated by switching disks between Batch Update and Batch Lock status can now use Share and never have to worry about switching again. A new utility is also available for performing pc commands from the mainframe (eg. dir, copy, delete, etc.).

Installation instructions will be available at the beginning of December. Watch the TSO broadcast messages for details. If you have any questions about the new release or need help installing it, call Randy in the Information Center at 444-2973.
Free Microcomputer Mini Demonstration

Lotus Value Pack Free Demonstration: presented by Brett McAlister of the Information Center

DATE: December 16, 1988
TIME: 1:00 pm to 3:00 pm
PLACE: Room 25, Mitchell Building
COST: No Charge
LIMIT: 20

This demonstration is to familiarize representatives from each department on the installation and use of the Lotus Value Pack diskette. Attendees should be persons in a position to distribute software within their respective departments and/or train others in its use.

Topics to be covered are:
- The Lotus Add-in Manager
- The Lotus Speedup add-in
- The Lotus Learn add-in
- Lotus 1-2-3 ver. 2.0 and 2.01 copy protection removal
  (there is NO copy protection removal for ver. 1a)

Attendees should bring a blank formatted diskette for their copy of Value Pack.

Mainframe Computer Mini Demonstrations

CULPRIT MATCH FILE PROCESSING: presented by Randy Holm or Sheralyn Thompson-Marble of the Information Center

DATE: November 18, 1988
TIME: 1:00 pm to 3:00 pm
PLACE: Room 25, Mitchell Building
COST: No charge
LIMIT: 20

Learn how to match 2 or more files using CULPRIT and how to code the various processing needed for matched or unmatched conditions.

DISK MANAGEMENT: presented by Randy Holm of the Information Center

DATE: December 8, 1988
TIME: 1:00 pm to 3:00 pm
PLACE: Room 25, Mitchell Building
COST: No charge
LIMIT: 20
Learn how to manage disk space used by your systems on the mainframe:

- Estimating space to be used
- Device characteristics (3350, 3380)
- Allocating space
- Authorizing permanent space
- Space costs
- Backup requirements
- Keeping track of disk datasets
- Blocking for efficient use and portability
### Data Network Classes

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>Nov 14</td>
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<td>Personal Services/PC</td>
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<tr>
<td>Nov 18</td>
<td>am</td>
<td>Personal Manager</td>
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<td>Culprit Match File Processing—MINI</td>
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<td>PC SAS</td>
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<td>Dec 9</td>
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<td>Disk Management—MINI</td>
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<tr>
<td>Jan 18</td>
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<td>Telephone Station User Training</td>
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### Microcomputer Classes

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<td>Nov 9-10</td>
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<td>Advanced Features of WordPerfect 5.0</td>
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<tr>
<td>Nov 16</td>
<td></td>
<td>Intermediate DOS</td>
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<tr>
<td>Dec 5-6</td>
<td></td>
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<tr>
<td>Dec 9</td>
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<td>Introduction to WordPerfect 5.0</td>
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<td>Dec 15-16</td>
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<td>Introduction to Lotus 1-2-3</td>
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<td>Introduction to WordPerfect 4.2</td>
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<tr>
<td>Jan 10-11</td>
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<td>Introduction to Lotus 1-2-3</td>
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<td>Jan 12</td>
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<td>Fundamentals of DOS</td>
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<td>Jan 13</td>
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<td>Conversion for WordPerfect 4.2 to 5.0</td>
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</table>
TRAINING SCHEDULE

STATE DATA NETWORK CLASSES

BASIC TERMINAL SKILLS: presented by the staff of the Information Center
DATE: January 27, 1989
TIME: 8:30 am to 4:00 pm
PLACE: Yellowstone Room, DNRC Building
COST: $50.00
LIMIT: 8
PREREQUISITE: 3270nd (interactive class on terminal operation)

BASIC TERMINAL SKILLS is a hands-on workshop to provide experience using computer terminals and the SPF editor. The SPF editor is an easy-to-learn menu used to enter data and programs into the State of Montana central computer system. Entering data, changing data and submitting programs for execution are covered in detail. Also covered are SPF's utility functions and how to track job output.

This course is essential for state government personnel using terminals tied into the State of Montana central computer. This course is a prerequisite for many other ISD classes.

PERSONAL MANAGER (PM): presented by Jeanette Rushford of the Information Center
DATE: November 23, 1988
TIME: 1:00 pm to 3:00 pm
PLACE: Room 25, Mitchell Building
COST: $25.00
LIMIT: 10
PREREQUISITE: Beginning Microcomputer Skills or Basic Terminal Skills

Personal Manager is a calendaring product available through the Division's mainframe. It is used for scheduling meetings (for yourself and others) and vacations, reserving resources like conference rooms, and even taking telephone messages.

USING PERSONAL SERVICES/PC (PS/PC): presented by Jeanette Rushford or Melanie Coughlin of the Information Center
DATE: November 14, 1988
TIME: 8:30 am to 11:00 am
PLACE: Room 25, Mitchell Building
COST: $35.00
LIMIT: 10
PREREQUISITE: Beginning Microcomputer Skills and experience with either WordPerfect or DisplayWrite3
PS/PC allows you to electronically send and receive messages or files. A document created by either WordPerfect or DisplayWrite3 can be distributed to any other person also using PS/PC by going through DISOSS on the state's mainframe.

To use PS/PC you must have the Personal Services/PC software, the IBM PC 3270 Emulation Program and adapter, and a coaxial cable or phone line connecting your PC to the mainframe.

INTRODUCTION TO SAS: presented by Gary Wulf of the Department of Commerce

DATE: November 28, 29, 30 and December 1, 1988
TIME: 8:30 am to 4:30 pm
PLACE: Room 25, Mitchell Building
COST: $200.00 (all modules) plus manual
LIMIT: 10
PREREQUISITE: Depends on options selected. The course has been redesigned to accommodate both mainframe, PC, and mainframe to PC SAS.

Mainframe SAS or FSP: Basic Terminal Skills, TSO signon ID, TSO library, and MVS JCL (Module 1 below satisfies the JCL requirement.)

PC SAS only: Basic Microcomputer Skills
PC & Mainframe: All of the above

SCHEDULE:
Module 1, JCL for mainframe SAS, 1/2 day, November 28, 8:30 to 12:00
Module 2, Intro to SAS for IBM Mainframe and PC's, 2 1/2 days, November 28, 1:00 to 4:30, November 29, 8:30 to 4:30, and November 30, 8:30 to 4:30
Module 3, The SAS PC to Mainframe Link, 1/2 day, December 1, 8:30 to 12:00
Module 4, Designing online applications using SAS FSP (Full Screen Product), taught on mainframe only. 1/2 day December 1, 1:00 to 4:30

MANUALS REQUIRED FOR CLASSES:

<table>
<thead>
<tr>
<th>Title</th>
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<th>SAS Order</th>
<th>No.</th>
<th>Price</th>
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<td>P5856</td>
<td>19.95</td>
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<tr>
<td>SAS Procedures Guide, Rel. 6.03</td>
<td>X</td>
<td>P5843</td>
<td>15.95</td>
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</table>

Additional manuals are available from SAS which are quite useful. These will be discussed in class. Of special interest are the Statistical Procedures manuals which, though not covered in class,
are necessary for anyone doing advanced statistics. Students must register by October 24, 1988 to be sure manuals have been ordered for them by the Information Center.

Although SAS stands for Statistical Analysis System, it is a very powerful general purpose tool for capturing, editing, and reporting data. In just a few minutes, one can design and program a full screen data entry application for a terminal. Reports and statistical procedures can be coded to summarize and print the information entered.

This course is intended to teach the basics of SAS as a general tool and its use to prepare data for analysis by SAS statistical procedures. Throughout the class period, students will develop and program a variety of SAS features, including basic statistical procedures. The class does not attempt to teach statistics and prior knowledge of statistics is not necessary.

Note: The class will be taught using personal computers. If you will be taking the mainframe options and are not familiar with a 3270 terminal emulator running on a PC, please so indicate on the registration form and arrangements will be made to put a 3270 type terminal in the classroom.

Please contact Brett McAlister at the Information Center (444-2973) if you have any questions.
MICROCOMPUTER CLASSES

BEGINNING MICROCOMPUTER SKILLS: presented by the staff of the Information Center

**DATE:** (one day only) December 9, 1988
January 23, 1989

**TIME:** 8:15 a.m. to 4:30 p.m. each day

**PLACE:** Room 25, Mitchell Building

**NON-SUBSCRIBER COST:** $60.00

**SUBSCRIBER COST:** $40.00

**LIMIT:** 12

**PREREQUISITE:** None

This course will give participants brief hands-on experience with microcomputers. Topics to be covered:

- The machine
- The operating system
- Communications
- Word processing
- Spreadsheets and graphics
- File management

All class time will be spent using microcomputers and software. The participant will learn what microcomputers can do and how to approach them with a positive attitude. This course or its equivalent is a prerequisite for other microcomputer courses.

FUNDAMENTALS OF DOS: presented by Gale Kramlick or Melanie Coughlin of the Information Center

**DATE:** January 12, 1989

**TIME:** 8:30 am to 4:30 pm

**PLACE:** Room 25, Mitchell Building

**NON-SUBSCRIBER COST:** $60.00

**SUBSCRIBER COST:** $40.00

**LIMIT:** 12

**PREREQUISITE:** Beginning Micro Skills and/or 3 months micro experience

FUNDAMENTALS OF DOS is intended for microcomputer users who need to know more about controlling their microcomputer through its operating system. Programming experience is NOT required.

Topics to be covered include:
- What is DOS? Why is it necessary to know about it?
- DOS names for peripherals
- File naming
- Special files like CONFIG.SYS
- Internal commands - DIR, ERASE, RENAME, TYPE, COPY and their variations

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External commands - FORMAT, SYS, DISKCOPY, CHKDSK, MODE
How to interpret batch files
Backup procedures

INTERMEDIATE DOS: presented by Gale Kramlick of the Information Center

DATE: November 16, 1988
TIME: 8:30 am to 4:30 pm each day
PLACE: Room 25, Mitchell Building
COST: $50.00
LIMIT: 12
PREREQUISITE: Fundamentals of DOS or appropriate experience

This class is designed to follow the Information Center's "Fundamentals of DOS" class. It is not designed for programmers and does not intend to teach all the advanced features of the operating system.

The topics that are covered in "Intermediate DOS" are:
- ATTRIB
- MODE
- DISKCOMP
- SELECT
- REPLACE
- LABEL
- JOIN
- XCOPY

Other features of the Disk Operating System that will be discussed are:
- Filters (FIND, MORE)
- Batch File Creation (EDLIN, Batch file commands)

==================================================================
WORD PROCESSING CLASSES
==================================================================

INTRODUCTION TO WORDPERFECT 4.2: presented by Melanie Coughlin of the Information Center

DATE: December 5 and 6
January 9 and 10, 1988
January 30 and 31, 1989
TIME: 8:30 am to 3:30 pm on December 5
8:30 am to 12:00 noon on December 6
8:30 am to 3:30 pm on January 9
8:30 am to 12:00 noon on January 10
8:30 am to 3:30 pm on January 30
8:30 am to 12:00 noon on January 31
PLACE: Room 25, Mitchell Building
NON-SUBSCRIBER COST: $90.00
SUBSCRIBER COST: $60.00
LIMIT: 12
PREREQUISITE: Beginning Microcomputer Skills
This course is intended for anyone interested in learning the basics of WordPerfect. This class will concentrate on text creation, use of function keys, editing, formatting, printing, filing, and retrieving documents. Merging documents, macro creation, block functions and use of the spell checker are also covered.

INTRODUCTION TO WORDPERFECT 5.0: presented by Gale Kramlick or Melanie Coughlin of the Information Center

DATE: December 5 and 6
      December 13 and 14, 1988
      January 16 and 17, 1989

TIME: 1:00 to 4:30 pm on December 13
      8:30 to 3:30 pm on December 14
      8:30 to 3:30 pm on January 9
      8:30 to 12:00 noon on January 10

PLACE: Room 25, Mitchell Building

NON-SUBSCRIBER COST: $90.00
SUBSCRIBER COST: $60.00
LIMIT: 12

PREREQUISITE: Beginning Microcomputer Skills

This class is designed for beginning users of WordPerfect 5.0. Experience with WordPerfect 4.2 is not necessary. The class will take the participants through the fundamentals of creating, printing, and editing documents. The new Setup feature will be discussed. Formatting documents as they are created and after creation will be covered. Some of the time saving features such as spell check, merges, block functions and macros will also be covered.

ADVANCED FEATURES OF WORDPERFECT 5.0: presented by Gale Kramlick or Melanie Coughlin of the Information Center.

DATE: November 9 and 10, 1988
      January 24 and 25, 1989

TIME: 8:30 to 3:30 pm on November 9
      8:30 to 12:00 noon on November 10
      8:30 to 3:30 pm on January 24
      8:30 to 12:00 noon on January 25

PLACE: Room 25, Mitchell Building

NON-SUBSCRIBER COST: $90.00
SUBSCRIBER COST: $60.00
LIMIT: 12

PREREQUISITE: Beginning Microcomputer Skills
Introduction to WordPerfect 5.0
For those already using WordPerfect 5.0, the advanced class will cover footnotes, column generation, sorting capabilities, dual document editing, changing fonts within a document, creating style sheets and master documents, keyboard layout, compose and graphics.

CONVERSION OF WORDPERFECT 4.2 TO 5.0: presented by Gale Kramlick or Melanie Coughlin of the Information Center

DATE: January 13, 1989  
TIME: 8:30 am to 4:30 pm  
PLACE: Room 25, Mitchell Building  
NON-SUBSCRIBER COST: $60.00  
SUBSCRIBER COST: $40.00  
LIMIT: 12  
PREREQUISITE: Beginning Microcomputer Skills

This class is designed for people in the process of converting from WordPerfect 4.2 to 5.0. Topics of the class will cover basic changes like menus, setup options, function key changes, converting document from 4.2 to 5.0 and from 5.0 to 4.2 and Reveal Codes. Some of the advanced features such as Macro Editing, Keyboard Layout, Fonts, Styles, Clip Art Images, Compose, Master Documents, Automatic Referencing, Document Compare and Kerning will also be covered.

SPREADSHEET CLASSES

INTRODUCTION TO LOTUS 1-2-3: presented by Gale Kramlick or Wendy Wheeler of the Information Center

DATE: December 15 and 16, 1988  
January 10 and 11, 1989  
TIME: 8:30 am to 3:30 pm on December 15  
8:30 am to 12:00 noon on December 16  
1:00 pm to 4:30 pm on January 10  
8:30 am to 3:30 pm on January 11  
PLACE: Room 25, Mitchell Building  
COST: $50.00  
LIMIT: 12  
PREREQUISITE: Beginning Microcomputer Skills

This course is designed for anyone with little or no previous 1-2-3 or microcomputing experience.

INTRODUCTION TO LOTUS 1-2-3 will concentrate on 1-2-3 spreadsheet design and commands and the creation of graphics. Printing spreadsheets and graphs is also covered. The more advanced features such as macro programming and database commands are covered in other courses.
Class format consists of lecture and hands-on practice followed by lab time on actual agency spreadsheets for further experience.

ADVANCED FEATURES OF LOTUS 1-2-3: presented by Brett McAlister or Gale Kramlick of the Information Center

DATE: January 19 and 20, 1989
TIME: 8:30 am to 4:30 pm on first day
8:30 am to 12 noon on second day
PLACE: Room 25, Mitchell Building
NON-SUBSCRIBER COST: $75.00
SUBSCRIBER COST: $65.00
LIMIT: 12
PREREQUISITE: Beginning Microcomputer Skills and Introduction to Lotus 1-2-3

This course is designed for anyone who is using 1-2-3 for basic spreadsheet work. Features not covered in the introductory class will be included (ex: protection status, range names, combining files, etc). Advanced features such as one and two-way sensitivity analysis tables will be covered in detail.

Class consists of lecture, hands-on practice, lab work or question and answer period if time permits.

=======================================
COMMUNICATIONS & NETWORKING CLASSES
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TELEPHONE STATION USER TRAINING: presented by LaVelle Brannin of the Telecommunications Bureau

DATE: January 18, 1989
TIME: 9:00 am to 10:00 am
PLACE: Room 25, Mitchell Building
COST: No Charge
LIMIT: 10
PREREQUISITE: none

This class is designed to familiarize new employees or refresh current employees with the features and use of the state telephone system. Also discussed will be the different calling capabilities available and the dialing plan. This is an interactive class combining demonstrations and hands on usage of the features and the dialing plan.
COMPUTER BASED TRAINING

The following tutorials are available in the Information Center in Room 24 of the Mitchell Building free of charge. The tutorials are either diskette or video-based. All are designed for individual study and self-pacing. Tutorials available are:

Using DBase III and DBase III+
Disk Operating System (DOS)
DOS: Hard Disk/Floppy Users, Beginning through Advanced
Using DisplayWrite 3
Introduction to DisplayWrite 4
Advanced DisplayWrite 4
The Instructor (microcomputer systems)
Intro to Lotus 1-2-3
Macro Programming & Advanced Lotus 1-2-3
Beginning R:Base System V
Typing Instructor
Turbo Pascal Tutor
Teach Yourself WordPerfect
WordPerfect-Seven Easy Steps (30 min. video)
WordPerfect 5.0 Overview

Call the Information Center at 444-2973 for more information or to check out the tutorials.
ISD CLASS ENROLLMENT APPLICATION
COMPLETE THIS APPLICATION IN FULL AND
RETURN IT TO THE INFORMATION CENTER BUREAU
PRIOR TO THE FIRST DAY OF CLASS

### COURSE DATA

<table>
<thead>
<tr>
<th>Course Requested:</th>
<th>Date Offered:</th>
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### STUDENT DATA

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<tr>
<th>Name:</th>
<th>Soc Sec Nbr (for P/P/P):</th>
<th>Agency &amp; Division:</th>
<th>Mailing Address:</th>
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<tr>
<th>Phone:</th>
<th>How have you met the required prerequisites for this course? Explain giving the class(es) taken, Information Center tutorial(s) completed, and/or experience.</th>
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### BILLING INFORMATION/AUTHORIZATION

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<th>Are you an ISD subscribing agency:</th>
<th>ISD Billing Number (5 digits):</th>
<th>Authorized Signature:</th>
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FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS CANCELLATIONS ARE MADE THREE DAYS BEFORE THE DATE FOR EACH CLASS.