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A guide to NIU computer facilities

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NORTHERN ILLINOIS UNIVERSITY

A Guide to NIU Computer Facilities

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INTRODUCTION

Northern Illinois University provides an extremely modern and diverse computing environment for its students, faculty, and staff. Computer facilities on campus include an on-site Amdahl mainframe computer, IBM and Harris minicomputers, and IBM, Apple, Kaypro, and Corona microcomputers. The diverse computer facilites at NIU help meet the computing needs of thousands of people from almost every academic and administrative department on campus. But for those individuals new to the campus, this diversity often makes it difficult to determine exactly what facilities exist on campus, which of these facilities they can and should access, and how they can learn to access those facilities. This manual is designed specifically for those students, faculty, and staff new to computing at NIU. The first section of this manual provides an overview of computing at NIU. The second part of the manual gives a detailed account of the various computer facilities at NIU. This section will help new individuals determine what facilities they need for their particular applications, where these facilities exist, and who can access them. The third part of this manual examines the various forms of assistance that exist to help new users learn to access the computer facilities on campus. This section provides a great deal of information including a list of offices and phone numbers for obtaining information or help.

OVERVIEW OF COMPUTING AT NIU

NIU offers a modern and diverse computing environment to all students, faculty, and staff. NIU's computer facilities include mainframe, minicomputers, and microcomputers. NIU has eight computer labs as well as terminals in academic and administrative offices all over the campus. Altogether, there are over five hundred terminals on campus. In addition, users can access computer facilities from terminals at home. The mainframe computer is available at least 22 hours each day, and the minicomputer and microcomputer facilities are available almost as much. Altogether, over 7000 people at NIU use computers 140 hours a week.

In addition to the mainframe, minicomputers, and microcomputers, NIU also has 2 keypunches and 2 cardreaders. NIU also has a variety of information storage devices including 8 tape drives and 2.5 billion bytes of on-line 3350-type disk storage reserved for academic use. 7 line printers and a high speed laser printer serve the printing needs on campus.

The Amdahl mainframe serves the majority of the computing needs at NIU. Users access the mainframe either through SUPERWYLBUR or the various minicomputers. A powerful computing tool, the Amdahl has enough capacity to serve all the various administrative computing needs as well as the various computing needs of students and faculty throughout the campus.

In addition to the various minicomputers which serve as methods of access to the mainframe, NIU has several minicomputers which help meet additional academic computing needs. While not as powerful as

the mainframe, these minicomputers are important in meeting additional research and teaching needs on campus.

Microcomputers are playing an increasingly important role in computing at NIU. In the past, most microcomputers were used almost solely as dedicated wordprocessors. But with the development of more powerful machines and more useful software, microcomputers have become increasingly more important in meeting the academic computer needs on campus.

COMPUTER FACILITIES AT NIU

As the overview of computing at NIU clearly indicates, NIU has a large and diverse assortment of computer facilities. In order to more easily examine these various facilities, we will group them into three main categories: hardware and peripherials, software, and lab facilities. Due to the enormous diversity of computer facilities at NIU, the following discussion highlights only the most commonly used facilities. If you do not find the facilities you need listed here or if you have any questions, please contact Computer Information Center & User Services for additional information.

HARDWARE AND PERIPHERIALS

Computer hardware and peripherials constitute the actual physical components used in computing. At NIU, we have two categories of hardware and peripherials: unrestricted and restricted. Before going any further, we wish to say a few words about these two terms. None of the computer facilities at NIU are unrestricted in the sense that just anyone can use them. Anyone wishing to gain access to any of the computer facilities at NIU must 1) show legitimate need for such access, 2) secure permission to use any facilities (usually in the form of obtaining an account), and 3) pay any accessed fees. Unrestricted computer facilities refer to all facilities that are available to all legitimate users regardless of their departmental affiliation or status as student, faculty, or staff. Restricted computer facilities are available only to members of certain colleges or departments within a college. Within each college or department, computer facilities are often further restricted based on status.

Unrestricted Computer Facilities

Amdahl 5850

Location: Swen Parson Hall

Access: Undergraduate, Graduate, Faculty, Staff

Terminal Locations: Access via terminals in UCL, PML, SCL, SUPERWYLBUR terminals and dial up lines, College of Business and College of Engineering labs

Software Available:

Major Languages	-- Assembler, C, COBOL, VS FORTRAN, PL/1
Minor Languages	-- PASCAL, Script
Statistical Packages	-- SAS, SPSSX, BMDP, IMSL, TSP

Description: The Amdahl 5850 (MVS, 24M-bytes of memory) is an on-site, mainframe computer serving the majority of administrative, academic, and research computing needs on campus. Over 500 terminals throughout the campus access the Amdahl either through SUPERWYLBUR terminals and dial up lines or through IBM or Harris minicomputers. In addition, the Amdahl utilizes 8 tape drives, 2.5 billion bytes of on-line 3350-type disk storage, 7 line printers, and 1 laser printer.

SUPERWYLBUR

Location: Swen Parson Hall

Access: Undergraduate, Graduate, Faculty, Staff

Terminal Locations: UCL, Founders Library (room 397), administrative and academic offices throughout campus, remote terminals using SUPERWYLBUR dial up lines

Software Available:

Major Languages	-- Assembler, C, COBOL, VS FORTRAN, PL/1
Minor Languages	-- PASCAL, Script
Statistical Packages	-- SAS, SPSSX, BMDP, IMSL, TSP

Description: Technically, SUPERWYLBUR is not a hardware component. Instead, SUPERWYLBUR is an interactive software package that functions as a text editor and formatter as well as a job submission and retrieval system. We discuss SUPERWYLBUR here because as a job submission and retrieval system, it functions as hardware. Using a SUPERWYLBUR

terminal or a remote terminal, modem, and SUPERWYLBUR dial up line, you can create and submit a program using any of the above languages or statistical packages as well as retrieve the results once the program executes. For information on SUPERWYLBUR text editing and formatting functions, read the description of SUPERWYLBUR given in the following section entitled SOFTWARE.

IBM PC and Apple IIe Microcomputers

Location: IBM Microcomputer Lab, Graham Hall, rooms 136-138
Apple Microcomputer Lab, Graham Hall, rooms 140-142

Access: Undergraduate, Graduate, Faculty, Staff (primarily used by undergraduate students)

Terminal Locations: IBM Microcomputer Lab, Graham Hall, rooms 136-138
Apple Microcomputer Lab, Graham Hall, rooms 140-142

Software Available: IBM PC's -- WordStar, WordStar Tutor, The Word Plus, Punctuation and Style, DbaseII, SuperCal3
Apple IIes -- WordStar, Apple Works, Apple Works Tutor, Typing Tutor III, Spelling Check, Grammar Check, Apple Dos 3.3 and CPM

Description: The IBM PC's and Apple IIes offer an alternative to mainframe computing. While not as powerful as the mainframe, the microcomputers have several advantages. Each microcomputer has its own CPU. Thus you never have to wait for the computer to process your program. In addition, the microcomputers are never "down." If there is a problem with a particular micro, you simply use another computer. Furthermore, the software for microcomputers is extremely easy to learn. And while the microcomputers are not as powerful as the mainframe, they provide more than adequate wordprocessing and spreadsheet capabilities for most undergraduate coursework.

Laser Printer

Location: Swen Parson Hall

Access: Undergraduate, Graduate, Faculty, Staff

Terminal Locations: Accessed through any SUPERWYLBUR terminal

Description: The laser printer is high-speed printer which

produces a crisp, clean image almost indistinguishable from typesetting. The laser printer prints either two logical pages per page or one logical page per page. The default print is two logical pages per page. All SUPERWYLBUR users have access to the laser printer's default print without charge. To obtain printouts of one logical page per page, you must obtain permission from you department chair.

Restricted Computer Facilities

Department of Computer Science

The Department of Computer Science is one of the largest users of computer facilities on campus. The department provides hands-on programming experience on mainframe, minicomputers, and microcomputers for all its undergraduate and graduate students. In addition, the department provides its faculty with state-of-the-art research and development facilities. The department is committed to keeping its computer facilities on the cutting edge of technology. Recently, the department added an Encore Multi-Max system and a Multi/M system. The department has also recently added two new Fujitsu high-speed printers to share the printing load in the labs and has just completed the installation of state-of-the-art Intelligent Workstations for faculty members. The recent additions in equipment have allowed the department to expand their traditional course offerings to include classes in Artificial Intelligence, expert systems, and parallel processing. Furthermore, the department is moving towards an interactive environment for all students and faculty.

Through its commitment to staying on the cutting edge of technology, the Department of Computer Science has established itself as one of the top computer departments in the country. NIU's computer

science program, both at the undergraduate and graduate level, is highly respected among businesses in the Chicago area as well as across the country. Because of the popularity of the program, admission to the Department of Computer Science is limited and highly competitive. For more information on admission to the department, consult the NIU Undergraduate Catalog or call the Department of Computer Science.

Harris 300 and Harris 500 Minicomputers

Location: Swen Parson Hall

Access: Undergraduate, Graduate, Faculty

Terminal Locations: UCL, PML, SCL, Intelligent Workstations (faculty)

Software Available:

Major Languages	-- Assembler, C, COBOL, VS FORTRAN, PL/1
Minor Languages	-- PASCAL, Script
Statistical Packages	-- SAS, SPSSX, BMDP, IMSL, TSP

Description: The 2 Harris 300 and 1 Harris 500 minicomputers are attached to the Amdahl 5850 mainframe computer as well as the Multi/M minicomputer. The Harris minicomputers perform text editing, file management, and program submission functions for the Amdahl mainframe. Harris access to the Multi/M system allows students to perform microcomputing assignments.

Multi/M

Location: Psych/Math Building

Access: Undergraduate, Graduate, Faculty

Terminal Locations: Multi/M is accessed through Harris terminals located in UCL, PML, SCL, Intelligent Workstations (faculty)

Software Available: A wide variety of microcomputer software

Description: The Multi/M system allows students to gain hands-on experience with microcomputing without a costly investment in a large number of microcomputers and various microcomputer software. With the Multi/M

system, the students use the Harris terminals to access the minicomputer. The Multi/M simulates a microprocessing environment by making the Harris terminal appear to be a microcomputer.

IBM XT and IBM AT Microcompters

Location: Psych/Math Building

Access: Undergraduates in advanced courses, Graduates

Terminal Locations: AI Lab, Psych/Math Building, room 256

Software Available: The IBM XT and AT micros are primarily used to run Artifical Intelligence software

Description: The IBM XT and AT microcomputers are primarily used for advanced coursework in Artifical Intelligence. These courses are generally offered at the graduate level, although particularly advanced undergraduate students may apply for these classes.

Encore Multi-Max

Location: Swen Parson Hall

Access: Faculty

Terminal Locations: The Encore Multi-Max is accessed through Intelligent Workstations in each faculty office

Software Available: The Encore Multi-Max runs under UNIX

Description: The Encore Multi-Max system runs under UNIX and provided parallel processing capabilities. The Encore has 6 CPUs and thus provides a very powerful research and development tool for the Computer Science faculty.

Intelligent Workstations

Location: Psych/Math Building, faculty offices

Access: Faculty

Terminal Locations: Psych/Math Building, faculty offices

Software Available: All software packages running on the Amdahl mainframe, the Multi/M, and the Encore Multi-Max

Description: Each Intelligent Workstation consists of a 3270 PC connected directly to the Amdahl mainframe computer. The Intelligent Workstations also have access to the Harris minicomputer system as well as the Multi/M system and the Encore Multi-Max system. Thus the faculty can access the majority of the computing power on campus from their desk tops. The Intelligent Workstations are sure to play an important role in both academic research and course development.

College of Business

Microcomputers play an important role in many classes offered through the College of Business. These classes offer practical, hands-on experience with many microcomputer applications including the use of wordprocessing, spreadsheets, and project planners and simulators. In addition, students can create SAS and SPSSX programs using the non-document mode in WordStar and then use a terminal with a dedicated RJE line to transfer the program to the Amdahl mainframe for execution.

Kaypro and Corona Microcomputers

Location: CBL, Wirtz Hall, room 103A/B

Access: Undergraduate, Graduate

Terminal Locations: CBL, Wirtz Hall, room 103A/B

Software Available: Lotus (123, Utilities, Install, Print Graph), MS Dos WordStar, Basic, VP Planner, SuperCal2 and 3, MicroStat, Harvard Total Project Manager, GPSS

Description: The College of Business uses Kaypro and Corona microcomputers to perform a wide range of business computer applications. Business students use these micros to perform wordprocessing, format spreadsheets, do statistical analysis, and perform project simulations.

Transfer Terminal with Dedicated RJE Line

Location: CBL, Wirtz Hall, room 103A/B

Access: Undergraduate, Graduate

Terminal Location: CBL, Wirtz Hall, room 103A/B

Software Available: The transfer terminal transfers SAS and SPSSX program created in WordStar's non-document mode

Description: The transfer terminal allows College of Business students to create SAS and SPSSX programs on the microcomputers using the non-document mode of WordStar. The students can then transfer the file to the Amdahl mainframe using the dedicated RJE line. Once the program has executed, the results are transmitted back across the RJE line. This allows students to access the mainframe to perform more complicated statistical analysis.

College of Engineering

The College of Engineering uses a variety of computer facilities to perform engineering applications. These applications include a variety of computer graphics as well as programming using FORTRAN. As the recently established College of Engineering grows, their computer uses and resources will undoubtedly increase.

IBM 4361

Location: College of Engineering, Sycamore (?)

Access: Undergraduate, Faculty

Terminal Locations: College of Engineering, Sycamore

Software Available: CAD/CAM, CADAM, FORTRAN

Description: The College of Engineering uses the IBM 4361 minicomputer to access the Amdahl mainframe. Users gain access to the minicomputer through the IBM 580 workstations or the Kaypro 286i terminals.

IBM 580 Workstation

Location: College of Engineering, Sycamore

Access: Undergraduate, Faculty

Terminal Locations: College of Engineering, Sycamore

Software Available: CAD/CAM

Description: The IBM 580 workstations provide the College of Engineering with full CAD/CAM capablities. The CAD/CAM workstation terminals have full graphics capablities, a mouse, and function keys.

Kaypro 286i

Location: College of Engineering, Sycamore

Access: Undergraduate, Faculty

Terminal Locations: College of Engineering, Sycamore

Software Available: FORTRAN, CADAM

Description: The Kaypro 286i microcomputers provide graphic capabilities for CADAM. In addition, users access the Kaypro 286i micros to perform engineering applications using FORTRAN.

College of Education

The College of Education maintains a number of Apple IIes and Apple MacIntosh microcomputers. Undergraduate and graduate students in the College of Education use the microcomputers for classroom and research projects. The primary purpose of the micro is learning to use computers as a teaching tool.

Apple IIe and Apple MacIntosh Microcomputers

Location: Gabel Hall Learning Center, Gabel Hall, room 8

Access: Undergraduate, Graduate

Terminal Locations: Gabel Hall Learning Center, Gabel Hall, room 8

Software Available: Over 150 software packages available, mostly educational, including Apple Works and software with graphics capabilities

Description: The Apple IIe and Apple MacIntosh microcomputers provide the College of Education with powerful learning tool. The wide variety of educational software allows students to gain valuable experience in using the computer as a teaching aid. The College of Education chose Apple microcomputers because of their prevalence in a large majority of school systems.

Department of Math

The Department of Math maintains its own Vax 11/750 minicomputer for faculty research as well as file services and electronic mail for faculty and staff. Currently, the Department of Math is cooperating with the Department of Computer Science in a project to upgrade the Computer Science department's Encore Multi-Max. Once the upgrading is complete, the faculty of the Math department will have access to the Encore for their research needs.

Vax 11/750

Location: Department of Math, Watson Hall (?)

Access: Faculty, Staff

Terminal Locations: Various faculty and staff offices throughout the department

Software Available: The Vax 11/750 operates under a UNIX environment

Description: The Vax 11/750 provides the faculty of the Department of Math with a useful research tool. The UNIX operating system allows faculty to perform a wide range of mathematical applications. In addition, the Vax provides both faculty and staff with file services and electronic mail between terminals.

SOFTWARE

Computer software consists of the actual instructions which allow the computer to process information. While NIU as a large and confusing assortment of computer hardware, it has an even larger and more confusing assortment of computer software. This section discusses the more popularly used software packages available at NIU. In order to more easily examine the various software packages available at NIU, we have divided the software into categories based on their function. The three categories include wordprocessing software, statistical analysis and mathematical software, and programming languages software. If you do not find a software appropriate for your particular application or if you have any questions, please contact Computer Information Center & User Services for additional information.

Wordprocessing Software

WordStar

Hardware Required: Microcomputer

Access Through: IBM PC, Apple IIe, Kaypro, and Corona microcomputers

Recommended Use: Composing, editing, and printing memos, letters, and short papers (up to approximately 15 pages)

Description: WordStar is a powerful yet easy-to-learn wordprocessing tool. WordStar allows you to compose text at the keyboard. Once through composing, you can easily edit the text including inserting, deleting, and moving characters, words, sentences, or entire paragraphs. Once finished, you can easily print the completed text. Once you use WordStar to prepare text, you will never want to go back to a typewriter again.

Apple Works

Hardware Required: Microcomputer

Access Through: Apple IIe

Recommended Use: Composing, editing, and printing memos, letters, and short papers (up to approximately 15 pages)

Description: Apple Works is easy-to-learn and useful word-processing tool. Apple Works allows you to compose text at the keyboard. When through composing, you can easily edit and print the text. Apple Works is a useful wordprocessing tool, but it is less powerful than WordStar.

SUPERWYLBUR

Hardware Required: Amdahl mainframe

Access Through: SUPERWYLBUR terminals and dial up lines

Recommended Use: Composing, editing, and printing medium to large reports and papers

Description: SUPERWYLBUR is a useful text editor and formatter for larger wordprocessing applications. Since SUPERWYLBUR runs on a mainframe computer, it can more easily handle larger texts. In addition to the normal composing, editing, and printing functions, SUPERWYLBUR also provides users with a programming function. Users can program macros to perform commonly executed SUPERWYLBUR commands.

Script

Hardware Required: Amdahl mainframe

Access Through: SUPERWYLBUR terminals and dial up lines

Recommended Use: Composing, editing, and printing medium to large reports and papers, especially text requiring large amounts of revision or special formatting requirements such as Table of Contents or labeled tables and figures

Description: Of the various wordprocessing softwares available at NIU, Script is the most powerful. Like SUPERWYLBUR, Script runs on a mainframe so it can easily handle large texts. In addition to the normal wordprocessing features, Script has a number of powerful features which makes it particularly useful and powerful. Script automatically keeps track of page numbers as well as the numbers of parts, chapters, and sections. Therefore, if you insert or delete any page, part, chapter or section, Script automatically renumbers the various components of the text. Script also performs the same function for tables and figures. For additional ease in creating tables and figures, Script has a feature which allows you to enclose tables and figures in a box. Script makes footnotes easy by automatically placing the footnote at the bottom of the page. Script also has features for the automatic compilation of a table of contents and the easy compilation of indices.

Statistical Analysis and Mathematical Software

SAS

Hardware Required: Amdahl mainframe

Access Through: SUPERWYLBUR terminals and dial up lines, Harris 300 and 500 minicomputers, Intelligent Workstations

Recommended Use: Basic statistical analysis including frequencies, means, and correlation

Description: SAS is a statistical analysis software package primarily designed for basic statistical analysis such as frequencies, means, and correlation. SAS provides capabilities for creating bar, block, pie, and star charts as well as scatter plots. SAS also has a calendar feature which provides daily reporting of sums and means as well as scheduling displayed on a monthly calendar. SAS can merge, split, and sort data files. Furthermore, SAS can convert data files created under other statistical packages, including SPSSX, for use with SAS programs.

SPSSX

Hardware Required: Amdahl mainframe

Access Through: SUPERWYLBUR terminals and dial up lines, Harris 300 and 500 minicomputers, Intelligent Workstations

Recommended Use: Advanced statistical analysis and reporting including handling matrices, histograms, and cross tables

Description: SPSSX is a statistical analysis package designed for more advanced statistical analysis and reporting including the use of matrices, histograms, and cross tables. SPSSX, like SAS, can produce simple tables, but it is more useful for more advanced statistical analysis such as Pearson products, moment correlations, or time series fitting and forecasting. SPSSX can produce bar charts, histograms, cross tables, tables, reports, and plots. SPSSX has capabilities for handling SAS files. Like SAS, SPSSX can merge, split, and sort data files.

BMDP

Hardware Required: Amdahl mainframe

Access Through: SUPERWYLBUR terminals and dial up lines, Harris 300 and 500 minicomputers, or Intelligent Workstations

Description: A statistical package with some features not available in SAS or SPSSX

IMSL

Hardware Required: Amdahl mainframe

Access Through: SUPERWYLBUR terminals and dial up lines, Harris 300 and 500 minicomputers, or Intelligent Workstations

Description: A statistical and mathematical software package with computational subroutines written in FORTRAN

TSP

Hardware Required: Amdahl mainframe

Access Through: SUPERWYLBUR terminals and dial up lines, Harris 300 and 500 minicomputers, or Intelligent Workstations

Description: A mathematical software package designed to perform econometric analysis of time series data

MicroStat

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab), IBM PC's (IBM Microcomputer Lab)

Description: A statistical software package for micros

Lotus

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab)

Description: A spreadsheet software package for micros

DbaseII

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab), IBM PC's (IBM Microcomputer Lab)

Description: A spreadsheet software package for micros

SuperCal2

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab)

Description: A spreadsheet software package for micros

SuperCal3

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab), IBM PC's (IBM Microcomputer Lab)

Description: A spreadsheet software package for micros

VP Planner

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab)

Description: A project planning software package for micros

Harvard Total Project Manager

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab)

Description: A project planning software package for micros

GPSS

Hardware Required: Microcomputer

Access Through: Kaypro and Corona microcomputers (College of Business Lab)

Description: A general planning simulator software package for micros

Programming Languages Software

Programming languages software is primarily used in computer science courses. These courses teach students how to create computer programs to solve data processing problems. All language software

runs on the Amdahl mainframe and may be accessed through SUPERWYLBUR terminals and dial up lines as well as the Harris 300 and 500 minicomputers and Intelligent Workstations. For people outside the Department of Computer Science, it is unlikely you will need to actually learn to program using a languages software in order to meet your computer needs. The wordprocessing and statistical and mathematical software packages generally meet the average user's needs. For those of you within the Department of Computer Science or those of you who wish to learn programming, we provide a brief description of the various programming languages software available at NIU.

Assembler

Assembler is a low-level language primarily used for programming operating systems and other behind-the-sceen computer features. Programmers also use Assembler to program particularly slow executing code in order to enhance program performance. Because Assembler is a low-level language, it is fairly difficult to learn and manipulate. For users just learning Assembler, NIU has a student compiler ASSIST. ASSIST provides more detailed error reporting to help new users locate problems.

C

C is a high-level, relational language primarily used in developing Artifical Intelligence programs and expert systems.

COBOL

COBOL is the most popular business programming language. As a high-level language, COBOL is relatively easy to learn and use. As a primarily business applications language, COBOL has useful features for producing reports and processing large amounts of business data. For users learning COBOL, NIU has a student compiler called WATBOL. WATBOL provides detailed error reporting to help new users find errors.

VS FORTRAN

FORTRAN is a high-level language primarily used for mathematical applications. As a mathematical applications language, FORTRAN has special features for graphs and charts. For users learning FORTRAN, NIU has a student compiler called WATFIV. WATFIV provides detailed error messages to help new users locate mistakes.

PASCAL

PASCAL is a high-level language often used in business applications. As with all high-level languages, PASCAL is relatively easy to learn and use.

PL/I

PL/I is a high-level language often used in business applications. PL/I is often described as a cross between Basic and COBOL. For anyone with experience in either of these languages, PL/I is extremely familiar and easy to learn. For new users, NIU has a student compiler called PL/C. PL/C provides detailed error reporting to help users locate mistakes.

LAB FACILITIES

NIU has eight computing labs on campus. This section gives a brief description of each lab including the location, phone number, and facilities available.

University Computing Lab (UCL)

Location: Graham Hall, room 235

Phone No.: 753-0501

Hardware Available: 15 full screen SUPERWYLBUR terminals, 60 Harris system terminals, a locate terminal, 2 Fijitsu high-speed printers

Description: Along with SUPERWYLBUR terminals, Harris terminals, a locate terminal, and printers, the UCL has a wide variety of additional computer facilities. The UCL has a large reference library, output bins, and work, study, and lounge areas. Graduate staff assistants and student interns provide general consulting on JCL, text editors, and statistical

packages. The UCL is open to computer science students as well as all other computer users on campus.

Psych/Math Computing Lab (PML)

Location: Psych/Math Building, rooms 51-55

Phone No.: 753-1070

Hardware Available: 60 Harris system terminals, a locate terminal, 2 line printers

Description: Along with 60 Harris terminals, a locate terminal, and 2 line printers, the PML has a reference library, output bins, assignment drop boxes, work, study, and lounge areas. Use of the PML is restricted to computer science students, and consulting is confined to the Harris text editor and RJE system.

Satellite Computing Lab (SCL)

Location: Stevens Annex

Phone No.: 753-1615

Hardware Available: 30 Harris system terminals, a locate terminal, 2 line printers

Description: Along with 30 Harris terminals, a locate terminal, and 2 line printers, the SCL has a reference library, output bins, work, study, and lounge areas. Use of the SCL is restricted to computer science students, and consulting is confined to the Harris text editor and RJE system.

College of Business Lab (CBL)

Location: Wirtz Hall, room 103A/B

Phone No.: 753-0307

Hardware Available: 45 Kaypro microcomputers, 58 Corona PC's, numerous printers, 1 transfer terminal with dedicated RJE line

Description: The College of Business manages its own lab. Consultants and TAs are available in the CBL or in McMurray Hall. Use of the CBL is restricted to College of Business students.

IBM Microcomputer Lab

Location: Graham Hall, rooms 136-138

Phone No.: 753-1792

Hardware Available: 38 IBM microcomputers, numerous printers

Description: Along with the IBM microcomputers and printers, the IBM MCL has various reference manuals. The IBM MCL is available to all computer users on campus.

Apple Microcomputer Lab

Location: Graham Hall, rooms 140-142

Phone No.: 753-1788

Hardware Available: 25 Apple IIes, 13 printers

Description: Along with the Apple microcomputers and printers, the Apple MCL has various reference manuals. The Apple MCL is available to all computer users on campus.

Learning Center Lab

Location: Gabel Hall, room 8

Phone No.: 753-1241

Hardware Available: 20 Apple IIes, 2 Apple MacIntosh

Description: The College of Education maintains an Apple lab in the Learning Center. The lab is available to College of Education students for classroom and research projects.

Engineering Lab

Location: College of Engineering, Sycamore

Phone No.: Dr. Kim, 753-9965
Dr. Ganison, 753-9970

Hardware Available: IBM 4361 minicomputer, IBM 580 Workstations, Kayro 286i terminals

Description: The College of Engineering maintains a lab to perform engineering applications. These applications include computer graphics using CADAM and CAD/CAM as well as programming using FORTRAN.

ASSISTANCE FOR COMPUTER USERS AT NIU

After examining the various computer facilities at NIU, you are probably wondering just where to begin. Despite the maze of hardware, software, and lab facilities, do not despair. Along with a wide variety of computer facilities, NIU also provides a wide range of assistance to its computer users. The information in this section will show you how to obtain access to the various computer facilities and how to learn to use these facilities. In addition, this section provides a list of important offices and phone numbers for obtaining additional help.

OBTAINING ACCESS TO COMPUTER FACILITIES

New users must obtain a computer account before using mainframe and minicomputer facilities. This includes any users accessing SUPERWYLBUR, the Harris system, or Intelligent Workstations. In addition, anyone needing access to certain databases or to the laser printer (other than default value) must obtain a computer account for those facilities. Students accessing any of these facilities through classes are automatically assigned accounts and assessed any fees. Other eligible users must apply for an account through the Accounting Office, Swen Parson 120. In addition to filling out an application, applicants must obtain the permission of their advisor, supervisor, or department chair. If you have any questions, please call the Accounting Office at 753-1875.

In order to obtain access to the various microcomputer facilities on campus, you must obtain permission and pay any assessed

fees. If you are accessing any of the facilities through classes, you will automatically be placed on the list of eligible users and assessed any fees. For other users wishing to access the IBM or Apple Microcomputer Lab, contact Computing Information Center & User Services at 753-1802 for more information.

SHORT COURSES

Computer Information & User Services conducts a number of Short Courses throughout each semester. The Short Courses are free and are designed as a general introduction to acquaint new users with how to use various computer facilities on campus. At the beginning of each semester, Computing Information Center & User Services posts current Short Course schedules throughout the campus. For any information about schedules or course content, call Computing Information & User Services at 753-1802. To register for Short Courses, sign up in the UCL, Graham 235, or call the UCL at 753-0501.

Computer Infromation & User Services divides their Short Courses into five general areas: Facilities, Text Editing, Statistics, Microcomputers, and JCL. Below is a general summary of course offerings in each category. Some of these courses are also available for viewing in the UCL on videotape.

Facilities

Courses on facilities provide a broad overview of computing at NIU. This includes what facilities exist on campus and how to access them.

Text Editing

Courses in text editing include general and advanced instruction in SUPERWYLBUR, SUPERWYLBUR macros, and Script.

Statistics

Courses in statistics include general and advanced instruction in using SPSSX and SAS.

Microcomputers

Courses in microcomputers include the fundamentals of micros, introduction to micro hardware, introduction to MS/PC DOS (the micro operating system), general and advanced instruction in WordStar, databases, and spreadsheets, and instruction in how to buy a micro.

JCL

Courses in JCL include general and advanced instruction in writing JCL, the statements which allow you to get your job in and out of the computer.

DOCUMENTATION AND PUBLICATIONS

Computing Publications, Swen Parson 140, has IBM and CDC manuals and books on various computing topics. You may borrow extra copies, when available, for two weeks at a time. When all loan copies are out, you may examine file copies in the office.

Computing Publications is also responsible for publishing its own series of user's guides, manuals, and reference cards, the "Quick" series, and two newsletters. The following section briefly summarizes each of these publications. For a complete listing and description of the various publications available, pick up a copy of "Quick Doc" at Computer Information & User Services, Swen Parson 120.

User's Guides, Manuals, and Reference Cards

All User's Guides, Manuals, and Reference Cards are sold at the Holmes Student Center Bookstore. These publications cover a wide

range of subjects including SUPERWYLBUR, Script, the Harris system, and selected other subjects such as MVS JCL and Utilities. All these publications range in price from $0.50 to $4.50. Most publications cost either $1.00 or $2.00.

"Quick" Series

The "Quick" Series provides condensed presentations of basic information from User's Guides. All "Quick" Series are free and available from Computer Information & User Services, Swen Parson 120. Copies of some of the "Quick" Series are also available at the UCL, Graham 235. The "Quick" Series cover a wide range of topics including how to produce mailing labels and writing JCL for SAS and SPSSX. One particularly useful "Quick" Series is "Quick JCL," a general guide to the JCL necessary to run programs on the MVS system.

Newsletters

Computing Publications produces two free newsletters, Computing News and Microgram. Computing News keeps users informed about computing at NIU and provides other general computing information. Microgram concentrates on microcomputer topics. Both newsletters are available at the labs. In addition, you can sign up for a free subscription by stopping by Computing Publications, Swen Parson 140, or calling 753-9520.

CONSULTING

Computer Information and User Services provides a wide range of consulting services to assist users with any questions or problems. Short questions involving text editors, statistical packages, and JCL are handled in the UCL, Graham 235, or at the Hot Desk, Swen Parson 120. Teleprocessing questions are handled at the Hot Desk. To make an appointment for long questions or extensive consulting or to phone in a question, call 753-1802.

[Note: Students in programming classes are expected to rely on the department's Teaching Assistants for help with programs. Computer Information & User Services provides space for TAs and maintains a posted list of their hours in the PML.]

WHERE TO GO, WHO TO CALL

For general information regarding computer facilities at NIU, contact Computer Information and User Services, Swen Parson 120, 753-1802. For more specific information, see the list of offices and phone numbers listed below.

Accounting Office
Swen Parson 120
753-1875
--For information on obtaining a computer account

Billing Information
Swen Parson 120
753-0477

Bin Assignments
Swen Parson 120
753-1802

Computing Labs (Lab hours are posted outside the labs and subject to change. For more information stop by or call the lab.)

- --University Computing Lab (UCL)
  Graham Hall 235
  753-0501
- --Psych/Math Computing Lab (PML)
  Psych/Math Building 51-55
  753-1070
- --Satellite Computing Lab (SCL)
  Stevens Annex
  753-1615
- --College of Business Lab (CBL)
  Wirtz Hall 103A/B
  753-0307
- --IBM Microcomputer Lab (IBM MCL)
  Graham Hall 136-138
  753-1792
- --Apple Microcomputer Lab (Apple MCL)
  Graham Hall 140-142
  753-1788
- --College of Education Lab
  Gabel Hall 8
  753-1241
- --College of Engineering Lab
  College of Engineering, Sycamore
  753-9965 or 753-9970

Consulting Appointments
Swen Parson 120
753-1802

Computing Information Center--Small Machines
Swen Parson 120
753-1802

Computing Publications
Swen Parson 140
753-9520
--This office publishes and maintains computing publications at NIU

Short Course Information
UCL, Graham Hall 235
753-0501
--Copies of Short Course schedules are posted throughout the campus each semester

SUPERWYLBUR dial up connection
753-9200

System Status
Swen Parson 10
753-0148
--The NIU system is preemptible which means it is quite likely to be unavailable to users after 6 p.m. on Saturday until 2:30 p.m. on Sunday and after 9:30 p.m. on Sunday until 7 a.m. on Monday. Daily preventive maintenance and system improvement time is scheduled from 6 a.m. to 7 a.m. and 1 a.m. to 2 a.m. Tuesday through Friday. Harris system maintenance is scheduled for 8 a.m. to 10 a.m. Tuesday. Times listed are guidelines for planning purposes and are subject to change.

[redacted]

April 28, 1987

Mr. Phil Rider
Northern Illinois University
Computing Publications
Swen Parson 140
DeKalb, IL 60115

Dear Phil:

I am pleased to finally be able to submit to you the text for a manual detailing the various computer facilities at NIU. The text is divided into an introduction and three major sections. The three sections include an overview of computer facilities at NIU, a description of the various computer facilities, and an overview of the various forms of assistance available to computer users at NIU.

As you look through the text, you will probably notice several things. To begin with, you will notice that the College of Business is no longer using a Harris system to access the Amdahl mainframe. You will also notice I have omitted all information concerning MICC. I have omitted this information because NIU is discontinuing this service. NIU plans to replace MICC with a similar service by the end of the summer, but, at this time no plans have been finalized.

As you may notice, some of the information dealing with the computer facilities available to the College of Engineering is a little sketchy. I had the opportunity to talk with Dr. Kim over the phone. He gave me the little information I was able to gather. Unfortunately, I was not able to contact Dr. Ganison to clarify any questions I still had.

You will find a great deal of information concerning the computer facilities available to the Department of Computer Science. This is in part because I am personally familiar with the department. But more importantly, it is because the department is such a large user of computer facilities. When I spoke to Dr. Angotti, he was particularly excited about the departments new equipment acquisitions. He felt the Encore, Multi/M, and Intelligent Workstations will make a significant addition to the department and help expand course offerings. He also expressed his desire to expand course offerings in microcomputers and fields such as Artifical Intelligence and expert systems. Dr. Angotti felt, and I agree, that it would be to the advantage of the entire university to highlight the impressive computer facilities and highly respected program available in the Department of Computer Science.

All in all, I have learned a great deal and truly enjoyed working on this project. I would like to express my sincere thanks for all the time and help you have given me during this project.

If you have any questions regarding any of the information or sources, please let me know. Once again, thank you for the patient assistance you have given me in preparing my Capstone project for the University Honors Program.

Sincerely yours,

Sandra Denise Saylor

Enclosure