

NSU Libraries  
Shreveport Nursing Library  
Technology Enrichment Plan

2004/05 – 2009/10



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## Authoring Process

In the spring of 2005, the Interim Director of Libraries informed the library faculty that NSU Libraries were required to create a technology plan that would include the main campus and the two branch libraries. A library faculty member was appointed to draft a plan for the main campus library and the head of each of the two branch libraries was asked to draft a plan for her library. No format was mandated but the branch libraries were provided a copy of the draft created for the main campus.

Documents consulted for the writing of the Shreveport Nursing Library Technology Enrichment Plan include the following: “Technology Plan for the Watson Library: A Preliminary Treatment” by Michael Matthews; “Northwestern State Technology Enrichment Plan: 2002-2007” (NSTEP) (<http://www.nsula.edu/nstep>); “Office of Information Systems, Electronic Data Systems Policies and Standards” (<http://www.nsula.edu/edp/documents/edp.pdf>); “Goals and Objectives for Shreveport Nursing Library: 2003/2004 and 2004/2005,” “Technology Plan: 2004-1009” by the College of Education, Northwestern State University; “Northwestern State University: Leesville/Fort Polk Campus: Technology Enrichment Plan” (<http://www.nsula.edu/leesville/techplan.htm>); “Technology Plan: Department of Social Work: 2004-2006” ([http://www.nsula.edu/social\\_work/technologyplan.htm](http://www.nsula.edu/social_work/technologyplan.htm)); “Electronic and Continuing Education Technology Plan: January 2005-January 2006” (<http://www.nsula.edu/ece/techplan.asp>); “Information Systems: Unit Strategies” (<http://www.nsula.edu/informationssystem/strategies.asp>); “State of Nebraska Agency Comprehensive Information Technology Plan: 2004” (<http://www.nlc.state.ne.us/comp/itplan/itplan2004.html>); “Information Technology Plan for Cabrillo College Library: Years 2000/2002” (<http://libwww.cabrillo.edu/about/technologyplan.html>); “LOUIS: The Louisiana Library Network: 2002 Strategic Plan” ([http://appl003.lsu.edu/ocsweb/louishome.nsf/\\$Content/2002+Strategic+Plan?OpenDocument](http://appl003.lsu.edu/ocsweb/louishome.nsf/$Content/2002+Strategic+Plan?OpenDocument)); and the CON Faculty Organization Bylaws, section 7.5 on the “Learning Resources and Information Technology Committee.”

The first draft of Shreveport Nursing Library’s current technology plan is being modeled predominantly after the Northwestern State Technology Enrichment Plan (NSTEP) that was developed by in response to the request by the Louisiana Board of Regents to organize a plan for the use of the Student Government Association approved student technology fees. Content areas identified in the “State of Nebraska Agency Comprehensive Information Technology Plan” were added because they provided a mechanism for addressing components such as currently used applications, databases, data exchanges; hardware, operating systems, and networks; staffing; value of technology; and security. These components were considered to be significant because of the essential role technology plays in the delivery of library resources and services. The plan is also based on surveys already conducted by the College of Nursing (CON) Learning Resources & Information Technology Committee in which needs were identified by CON faculty and students. In keeping with the university’s effort to obtain feedback from students and faculty, copies of the Shreveport Nursing Library’s plan will

be distributed to the CON Dean, Learning Resources & Information Technology Committee, faculty, and students so that the plan can be revised according to comments received from these main “customers” of services and resources offered by the Shreveport Nursing Library.

Because input from the CON community is critical to the continued relevance of the Shreveport Nursing Library’s technology plan, the plan will be posted on the Shreveport Nursing Library’s web page, along with an invitation to submit feedback. Revisions to the plan will be posted as they occur.

### **Administration**

The Head-Shreveport Division, Shreveport Nursing Library, is responsible for the ongoing development and implementation of the Shreveport Nursing Library Technology Enrichment Plan (SNLTPE). The Head will write the plan and future revisions in consultation with the two Library Associates in the Shreveport Nursing Library. In order to ensure CON input, the SNLTPE will be submitted as an agenda item for discussion to the CON Learning Resources & Information Technology Committee, a committee on which the Head-Shreveport Division always serves.

Membership of the CON Learning Resources & Information Technology Committee:

- Faculty representatives from each academic program (ASN, LPN to RN, BSN, RN to BSN, BSRT, MSN)

- Network Administrator (Computer Technician)

- Media Coordinator (Media Services Specialist)

- Head of the Shreveport Nursing Library

- Coordinator, Clinical Laboratory

- Student representatives from each academic program (ASN, LPN to RN, BSN, RN to BSN, BSRT, MSN)

- Ex-Officio members: Dean, all directors (Graduate Studies and Research in Nursing, Undergraduate Studies in Nursing, Non-Traditional Studies in Nursing, Radiologic Technology, Student Services, and Grants, Planning & Development)

In addition, the SNLTPE will be submitted to the Director of Libraries and Library Faculty for their feedback.

### **Vision Statement**

The Shreveport Nursing Library is committed to the support of the distance education efforts of the CON, primarily through the aggressive movement from print to electronic resources whenever possible and through the development of curriculum-based information literacy skills, tied to electronic access, that leads students to evidence-based practice. The vision is that graduates of CON programs continue to utilize library resources throughout their professional careers and that the search strategy skills they learn during their tenure at the CON enable them to improve health care delivery, reduce

medical errors, and lower health care costs because their actions are evidence-based. Professional nursing and radiologic technology associations, as well as the Institute of Medicine, the National Library of Medicine, the Medical Library Association, and other governmental agencies, assert the importance and need for evidence-based practice to bring about a fundamental change in the way health care is delivered. CON accrediting agencies uniformly emphasize the need for skills in technology.

Sally Carroll, Head-Shreveport Division  
Shreveport Nursing Library

### **Environmental Context**

In keeping with the stated mission of the NSU Libraries (<http://sacs.nsula.edu/display/university.aspx?title=Libraries&year=2004>), the mission of the Shreveport Nursing Library is to provide the CON community with access to information in its many formats and through its many delivery systems to support the teaching, learning, research, and service functions of the CON. In light of the recent increased emphasis on evidence-based practice by the Institute of Medicine and the concomitant renewed interest in the knowledgebase and skill set required for literature searching, it is the educational mission of the Shreveport Nursing Library to support information literacy by teaching students, faculty, staff, and the larger community the skills they need to legally and ethically access, appraise, and integrate information from multiple sources and systems to influence the practice of nursing and radiologic technology.

The Shreveport Nursing Library serves the CON programs wherever they are taught, whether through distance education or the campuses at Alexandria, Natchitoches, Leesville, or elsewhere. The Shreveport Nursing Library also serves the larger community as a regional information and research center in the areas of nursing and radiologic technology, within the limits of the library's resources and primary commitment to the CON community.

The Shreveport Nursing Library provides resources and services to the university's largest distance education program, taught by the CON. Increasingly, the student population is comprised of both traditional students, who have recently graduated from high school and who are technologically astute, and non-traditional students, who are often already working in established professions but need training in technology. Both kinds of students expect library resources to be conveniently accessible via the Internet so as to accommodate their work schedules and geographic location. The technological progress made within the Shreveport Nursing Library has mainly been in the area of electronic resources and in the shift from in-person searching assistance to e-mail and telephone assistance and to electronic document delivery.

The primary service areas of the Shreveport Nursing Library are as follows:

- Reference/Research – patron assistance, literature searches, library orientation and information literacy instruction, online tutorials, online user guides, web page development
- Resource Sharing – in-house use and circulation of print and media, access of electronic resources, document delivery, Interlibrary Loan, honoring of LALINC and Friends Library cards
- Marketing – of resources and services
- Technology – selecting, designing, implementing, evaluating, and monitoring of computer equipment and software
- Resource Management – acquiring, processing, maintaining, and organizing of print, media, and electronic resources; negotiating of license agreements and prices; setting up, troubleshooting, and accessing of online resources, the online catalog, and the Internet
- Administration – gathering and providing of statistics pertaining to usage and service
- Fiscal Management – budget allocation and development of new funding

Primary partners and beneficiaries include: CON students, faculty, and staff; CON Learning Resources & Information Technology Committee; Nursing Information Literacy Quality Circle; registered library patrons; LALINC Library Card holders; walk-in library patrons; other Northwestern libraries (Natchitoches and Leesville); the Learning Center for Rapides Parish (Alexandria); DOCLINE libraries; LOUIS (the Library Network); the Louisiana Academic Library Information Network Consortium (LALINC); and ILLiad libraries.

Promoting customer focus and collaboration is accomplished by the Shreveport Nursing Library staff communicating with its partners and beneficiaries in-person; by telephone, fax, and e-mail; by Ariel and DOCLINE; by Shreveport Nursing Library web pages, and by mail. In addition to attending vendor-provided training on electronic databases, staff members participate in CON meetings and activities as well as in professional organizations and their activities, such as those sponsored by the LOUIS Users Group, the Louisiana Library Association, the Association of College & Research Libraries, LALINC, the Medical Library Association, the South Central Chapter of the Medical Library Association, the National Library of Medicine, the Health Sciences Library Association of Louisiana, the North American Serials Interest Group (NASIG), the Texas Library Association, and the American Library Association.

### **Shreveport Nursing Library Goals**

1. Create and maintain a responsive, student-oriented environment with College of Nursing students.
2. Provide programs, services, and operations throughout the Shreveport Nursing Library of high quality and effectiveness.
3. Enhance College of Nursing viability through effective enrollment management.
4. Promote economic development, community service, and an improved quality of life in the region.

## **Shreveport Nursing Library Technology Enrichment Plan (SNLTPEP)**

### **SNLTPEP Objectives**

1. Improve access to technology by students, faculty, and staff of the CON and of the Shreveport Nursing Library faculty and staff.
2. Provide current media, electronic resources, and a group instruction area with updated technology.
3. Upgrade and increase the number of public service computers.
4. Improve and proliferate the use of electronic resources and library services for distance education taught by the CON.
5. Upgrade and maintain the Shreveport Nursing Library communication network and infrastructure.
6. Provide a system for maintenance, upgrade, user training, and support of technology that will extend into the future.
7. Establish processes that encourage technology initiatives by faculty, staff, and students.
8. Encourage innovation and research.
9. Provide a system for maintenance, upgrade, training and support of administrative systems for Shreveport Nursing Library in order to better serve students.
10. Institute a technology budget for the Shreveport Nursing Library.

### **Action Plans and Action Plan Schedule**

Objective 1: Improve access to technology by students, faculty, and staff of the CON and of the Shreveport Nursing Library faculty and staff.

Objective 1 Action Plans:

- Provide common access to electronic library resources in the Shreveport Nursing Library and at all university sites supporting the CON.
- Provide Internet access (24 hours a day, 7 days a week) to electronic library resources and 63.5 hours of weekly service at the Shreveport Nursing Library during regular academic sessions.
- Provide increased access to university administrative systems (Blackboard, MyNSU, My Account) through links on Library web pages.
- Provide at least one public service computer in compliance with ADA standards.
- Add data ports in student worker areas, public service areas, and at staff photocopier.
- Improve access to library resources, especially electronic resources for distance education and off-campus locations.

Objective 1 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Provide common access to electronic library resources in the Shreveport Nursing Library and at all university sites supporting the CON.</li> <li>• Provide 24/7 Internet access to electronic library resources and 63.5 hours of weekly service during regular academic sessions.</li> <li>• Provide increased access to administrative systems (Blackboard, MyNSU, My Account) through links Library web pages.</li> <li>• Improve access to library resources, especially electronic resources for distance education and off-campus locations.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide at least one public service computer in compliance with ADA standards.</li> </ul>	<ul style="list-style-type: none"> <li>• Add data ports in student worker areas and at staff photocopier.</li> </ul>

Objective 2: Provide current media, electronic resources, and a group instruction area with updated technology.

Objective 2 Action Plans:

- Construct a group instruction area with new computers, a teacher workstation, a teacher mobile cart, and a projection screen.
- Order, process, set up, and market new media and electronic resources.
- Develop online tutorials and user guides on how to use electronic resources.
- Continue efforts to increase the number of staff in Shreveport Nursing Library.
- Continue developing a curriculum-based information literacy plan with the CON.
- Develop workshops that teach faculty how to incorporate the teaching of information literacy skills into the curriculum.
- Review annually the state of the network and infrastructure and initiate a timeline for maintenance and upgrading that will result in new computers for Shreveport Nursing Library faculty and staff work areas and new computers for public service area every 3-5 years.

Objective 2 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Identify the following: (1) minimum technology equipment standards for the instructional area within the Shreveport Nursing Library; and (2) training and support needs of CON faculty and Shreveport Nursing Library faculty/staff related to library hardware, software, and resources.</li> <li>• Assess status of the following: (1) group instruction area (percentage/equipment/use); (2) training and support for CON faculty and Shreveport Nursing Library faculty/staff related to use of library hardware, software, and resources; and (3) instructional design support needs of CON faculty and Shreveport Nursing Library faculty/staff for teaching the use of library resources.</li> <li>• Determine gaps in the following: (1) use, need, and desire of CON faculty and Shreveport Nursing Library faculty/staff related to technology equipment in the learning environment of the library; (2) knowledge about application of</li> </ul>	<ul style="list-style-type: none"> <li>• Provide instructional design support to CON faculty and Shreveport Nursing Library faculty/staff.</li> <li>• Utilize gaps assessment to enhance learning environment through increased faculty/staff education, support, and development of instructional media and library resources.</li> <li>• Continue implementation of an information literacy plan to address the identified gaps in the use, knowledge, training, and instructional design support.</li> <li>• Order, process, set up, and market new media and electronic resources.</li> <li>• Continue to develop online tutorials and user guides on how to use the electronic resources for CON faculty to include in their instructional design.</li> <li>• Continue efforts to increase the number of staff in Shreveport Nursing Library.</li> <li>• Refine the curriculum-based information literacy plan with the</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain or increase access to current technology for educational delivery (library hardware, software, and resources).</li> <li>• Continue implementation of an information literacy plan to address the identified gaps in the use, knowledge, training, and instructional design support.</li> <li>• Order, process, set up, and market new media and library electronic resources.</li> <li>• Continue to develop online tutorials and user guides on how to use the electronic resources for CON faculty to include in their instructional design.</li> <li>• Continue efforts to increase the number of staff in Shreveport Nursing Library.</li> <li>• Refine the curriculum-based information literacy plan with the CON faculty.</li> <li>• Continue to offer workshops that teach faculty how to incorporate the teaching of information literacy skills into the</li> </ul>

<p>technology to enhance learning related to library hardware, software, and resources; and (3) support activities and needs of CON faculty and Shreveport Nursing Library faculty/staff.</p> <ul style="list-style-type: none"> <li>• Develop plan to address the identified gaps in the use, knowledge, training, and instructional design support.</li> <li>• Seek funding to construct a group instruction area with new computers, a teacher workstation, a teacher mobile cart, and a projection screen.</li> <li>• Provide training to CON faculty and Shreveport Nursing faculty/staff for application of available library technologies (hardware, software, resources).</li> <li>• Order, process, set up, and market new media and electronic resources.</li> <li>• Continue to develop online tutorials and user guides on how to use the electronic resources for CON faculty to include in their instructional design.</li> <li>• Continue efforts to increase the number of staff in Shreveport Nursing Library.</li> <li>• Continue developing a curriculum-based</li> </ul>	<p>CON faculty.</p> <ul style="list-style-type: none"> <li>• Continue to offer workshops that teach faculty how to incorporate the teaching of information literacy skills into the curriculum.</li> <li>• Review the state of the network and infrastructure.</li> </ul>	<p>curriculum.</p> <ul style="list-style-type: none"> <li>• Review the state of the network and infrastructure.</li> <li>• Reassess needs on all campuses where CON offers courses and among all CON faculty related to library technologies (hardware, software, and resources), training, and instructional design support.</li> </ul>
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<p>information literacy plan with the CON.</p> <ul style="list-style-type: none"> <li>• Develop workshops that teach faculty how to incorporate the teaching of information literacy skills into the curriculum.</li> <li>• Review the state of the network and infrastructure.</li> </ul>		
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Objective 3: Upgrade and increase the number of public service computers.

Upgrade public service computers.

Provide technical support for public service computers.

Objective 3 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Replace the existing 10 public service computers with new ones.</li> <li>• Expand the number of public service computers (from 10 to 24).</li> <li>• Coordinate technical support for public service computers with the Student Technology Technician.</li> <li>• Add new software and media to public service computers.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide specialized software to public service computers.</li> <li>• Coordinate technical support for public service computers with the Student Technology Technician and Student Technology Coordinator.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate technical support for public service computers with the Student Technology Technician and Student Technology Coordinator.</li> <li>• Review the state of public service computers and software.</li> </ul>

Objective 4: Improve and proliferate the use of electronic resources and services for distance education taught by the CON.

Objective 4 Action Plans:

- Provide workshops on developing information literacy skills via the CON compressed video network.

- Utilize distance learning technologies (Blackboard).
- Utilize CON web servers for promoting library resources to CON faculty teaching web-based courses.
- Promote use of electronic reserves in Blackboard.
- Develop partnerships with business, industry, and military for delivery of electronic instruction and library resources to the workplace.

Objective 4 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Develop workshops for teaching information literacy skills via the CON compressed video network.</li> <li>• Project 5-year needs for increased Internet bandwidth; utilize usage statistics of nursing electronic resources.</li> <li>• Continue to develop online tutorials and user guides to support CON teaching of information literacy skills.</li> <li>• Reassess access needs for distance learning and off-campus students and faculty.</li> <li>• Reassess Shreveport Nursing Library support needs for web and web-supported courses taught by the CON.</li> <li>• Reassess student/faculty access to electronic library resources and state-of-the-university e-library resources for CON programs.</li> <li>• Establish a “Friends” library patron category, create a “Friends” promotional brochure, and continue to incorporate access to</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to provide workshops for teaching information literacy skills via the CON compressed video network.</li> <li>• Continue to promote addition of increased Internet bandwidth; provide usage statistics pertaining to nursing electronic resources.</li> <li>• Continue to develop online tutorials and user guides to support CON teaching of information literacy skills.</li> <li>• Continue to reassess the need and use of and continue asynchronous (e-mail) education and delivery of library service to CON faculty and students; implement support (training and infrastructure) for broad use of synchronous education /delivery via online workshops offered to Shreveport Nursing Library faculty and staff on electronic resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to provide workshops for teaching information literacy skills via the CON compressed video network.</li> <li>• Continue to promote addition of increased Internet bandwidth; provide usage statistics pertaining to nursing electronic resources.</li> <li>• Continue to develop online tutorials and user guides to support CON teaching of information literacy skills.</li> <li>• Continue to reassess the need and use of and continue asynchronous (e-mail) education and delivery of library service to CON faculty and students; implement support (training and infrastructure) for broad use of synchronous education /delivery via online workshops offered to Shreveport Nursing Library faculty and staff on electronic resources.</li> </ul>

<p>electronic nursing resources by all registered library patrons in license agreements.</p> <ul style="list-style-type: none"> <li>• Continue to seek partnerships with business, industry, and military for delivery of library electronic resources and electronic instruction on information literacy skills to the workplace.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide access to equitable distance learning library technologies on all campuses where CON courses are offered.</li> <li>• Operationalize Shreveport Nursing Library support for web and web-supported courses based on assessed needs.</li> <li>• Provide efficient student and faculty access to electronic library resources and state-of-the-university e-library resources for all campuses where CON courses are taught.</li> <li>• Promote “Friends” library cards to CON graduating students and resigning students.</li> <li>• Increase partnerships with business, industry, and military for delivery of library electronic resources and electronic instruction on information literacy to the workplace.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide access to equitable distance learning library technologies on all campuses where CON courses are offered.</li> <li>• Operationalize Shreveport Nursing Library support for web and web-supported courses based on assessed needs.</li> <li>• Continue to upgrade and support student and faculty library access to electronic library resources and state-of-the-university e-library resources for all campuses where CON courses are taught.</li> <li>• Continue to promote “Friends” library cards to CON graduating students and resigning students.</li> <li>• Maintain increase of partnerships with business, industry, and military for delivery of library electronic resources and electronic instruction on information literacy to the workplace.</li> </ul>
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Objective 5: Upgrade and maintain the Shreveport Nursing Library communication network and infrastructure.

Objective 5 Action Plans:

- Plan, program, and install additional intranet services.
- Maintain or expand web-based student services, such as electronic renewal of books and electronic document delivery of library resources.
- Implement a student security/debit card system (the “one-card” system).

Objective 5 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Plan and program additional intranet services (e.g., installation of CD-ROM library resources such as Mosby’s Basic Nursing Skills and NNN Linkages).</li> <li>• Implement web-based student services.</li> <li>• Begin implementation of “one-card” system in the Shreveport Nursing Library; begin implementation of entering “one-card” I.D. numbers into the SIRSI circulation software.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain existing and implement additional intranet services (e.g., license renewal for CD-ROM resources such as NNN Linkages).</li> <li>• Maintain web-based student services.</li> <li>• Continue implementation of “one-card” system.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate the maintenance and upgrading of campus communication network with the Information Systems Director, the Director of Technical Services, User Support Supervisor, and User Support Specialists; and with the Student Technology Coordinator and Technician.</li> </ul>

Objective 6: Provide a system for maintenance, upgrade, user training, and support of technology that will extend into the future.

Objective 6 Action Plans:

- Provide input for network administration and expansion of university technology infrastructure.
- Provide free workshops to CON students on use of library electronic resources and technology.
- Provide free workshops to CON faculty and staff and Shreveport Nursing Library faculty and staff on use of library electronic resources for continuing education credit.
- Provide continuing education to network administrators, technicians, and trainers.

- Establish support in the form of Shreveport Nursing Library personnel, Help Desks, and Budget for maintenance of new and existing library electronic resources and services:
  - NSU Journal List (EBSCO AtoZ)
  - Cambridge Scientific Abstracts CSA
  - CINAHL EBSCO
  - CINAHL ProQuest
  - Clinical Pharmacology
  - Cochrane Library
  - Electronic Journal Service (EBSCO EJS)
  - Health Source: Nursing/Academic Edition
  - Lexi-Comp Online
  - LexisNexis Academic Universe
  - MEDLINE
  - netLibrary
  - OVID (YourJournals@OVID, Books@OVID, Journals@OVID)
  - ProQuest Nursing Journals
  - PubMed
  - ScienceDirect Limited
  - TOXLINE
  - Shreveport Nursing Library web pages
  - SIRSI UnicornLINK System

Objective 6 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Train sufficient Shreveport Nursing Library faculty, staff, and student employees to support the SIRSI UnicornLINK System (circulation, serials, reserves, cataloging, reports).</li> <li>• Provide continuing education of Shreveport Nursing Library personnel in the use of library electronic resources and technology.</li> <li>• Provide continuing education of Shreveport Nursing Library personnel in the use of</li> </ul>	<ul style="list-style-type: none"> <li>• Provide workshops and training sessions in the use of library resources and technology that offer continuing education credit.</li> <li>• Provide opportunities for Shreveport Nursing Library personnel to attend training sessions in the use of library resources and technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze changes in technology and electronic library resources and target new training needs as they arise.</li> <li>• Provide ongoing training for Shreveport Nursing Library personnel in the administration and training of library electronic resources and technology.</li> </ul>

<p>application software (MS-Office Suite).</p> <ul style="list-style-type: none"> <li>• Provide continuing education of Shreveport Nursing Library personnel in how to consult with library patrons seeking information.</li> <li>• Develop continuing education workshops for CON faculty in developing information skills.</li> </ul>		
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Objective 7: Establish processes that encourage technology initiatives by faculty, staff, and students.

Objective 7 Action Plans:

- Establish community partnerships, on-the-job training, and focus groups between and within the areas of health care and library science.
- Provide invitational workshops to highlight faculty and student work.
- Develop the Shreveport Nursing Library website to showcase faculty and student research and presentations.

Objective 7 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Continue partnership with the AARP Foundation/SCSEP community program.</li> <li>• Update the Shreveport Nursing Library website to showcase the Nursing Information Literacy programs, resources, research, and presentations.</li> <li>• Update the Shreveport Nursing Library website to showcase online tutorials and user guides created by the Shreveport Nursing</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain or establish new community partnerships, on-the-job training, and focus groups between and within the areas of health care and library science.</li> <li>• Develop invitational workshops to highlight faculty and student work.</li> <li>• Continue to update the Shreveport Nursing Library website to showcase the Nursing Information Literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain or establish community partnerships, on-the-job training, and focus groups between and within the areas of health care and library science.</li> <li>• Continue to provide invitational workshops to highlight faculty and student work.</li> <li>• Continue to update the Shreveport Nursing Library website to showcase the Nursing Information Literacy</li> </ul>

<p>Library and CON faculty.</p> <ul style="list-style-type: none"> <li>• Continue support of technology-based research and grant-writing.</li> <li>• Develop a link on the Shreveport Nursing Library website that lists the presentations of Shreveport Nursing Library and CON faculty.</li> <li>• Publicize CON faculty or student programs, resources, research, posters, and presentations in the Shreveport Nursing Library.</li> </ul>	<p>programs, resources, research, and presentations.</p> <ul style="list-style-type: none"> <li>• Continue to update the Shreveport Nursing Library website to showcase online tutorials and user guides created by the Shreveport Nursing Library and CON faculty.</li> <li>• Continue support of technology-based research and grant-writing.</li> <li>• Update the link on the Shreveport Nursing Library website that lists the presentations of Shreveport Nursing Library and CON faculty.</li> <li>• Continue to publicize CON faculty or student programs, resources, research, posters, and presentations in the Shreveport Nursing Library.</li> </ul>	<p>programs, resources, research, and presentations.</p> <ul style="list-style-type: none"> <li>• Continue to update the Shreveport Nursing Library website to showcase online tutorials and user guides created by the Shreveport Nursing Library and CON faculty.</li> <li>• Continue support of technology-based research and grant-writing.</li> <li>• Continue to update the link on the Shreveport Nursing Library website that lists the presentations of Shreveport Nursing Library and CON faculty.</li> <li>• Continue to publicize CON faculty or student programs, resources, research, posters, and presentations in the Shreveport Nursing Library.</li> </ul>
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Objective 8: Encourage innovation and research.

Objective 8 Action Plans:

- Seek funding and support outside the regular budget allocated to the Shreveport Nursing Library.
- Provide peer recognition opportunities.
- Publish Shreveport Nursing Library and CON faculty research/presentation abstracts annually via the Shreveport Nursing Library web site.
- Promote cross-discipline research and grant-writing among faculty from the Shreveport Nursing Library and the CON.
- Establish working groups among faculty in the Shreveport Nursing Library and the CON.

Objective 8 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Increase technology integration through program development, equipment maintenance, and support in grant proposals.</li> <li>• Provide feedback to the Coordinator of Student Technology as to the management of funds generated by the Student Technology fees that are used for supporting library services and technology.</li> <li>• Coordinate annual peer recognition for efforts to use innovative technology in instructional settings and in the delivery or sharing of presentations and publications in professional arenas.</li> <li>• Coordinate the development of a database containing published abstracts of Shreveport Nursing Library faculty research, presentations, or innovative technology implementation in instructional settings.</li> <li>• Continue to participate in the Nursing Information Literacy Quality Circle, the CON faculty meetings, and the CON Learning Resources &amp; Information Technology Committee.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain annual increase in technology integration in the delivery of library services and resources.</li> <li>• Continue to provide feedback to the Coordinator of Student Technology as to the management of funds generated by the Student Technology fees that are used for supporting library services and technology.</li> <li>• Continue to coordinate annual peer recognition for efforts to use innovative technology in instructional settings and in the delivery or sharing of presentations and publications in professional arenas.</li> <li>• Maintain and update the database containing published abstracts of Shreveport Nursing Library faculty research, presentations, or innovative technology implementation in instructional settings.</li> <li>• Continue to participate in the Nursing Information Literacy Quality Circle, the CON faculty meetings, and the CON Learning Resources &amp;</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain annual increase in technology integration in the delivery of library services and resources.</li> <li>• Continue to provide feedback to the Coordinator of Student Technology as to the management of funds generated by the Student Technology fees that are used for supporting library services and technology.</li> <li>• Continue to coordinate annual peer recognition for efforts to use innovative technology in instructional settings and in the delivery or sharing of presentations and publications in professional arenas.</li> <li>• Maintain and update the database containing published abstracts of Shreveport Nursing Library faculty research, presentations, or innovative technology implementation in instructional settings.</li> <li>• Continue to participate in the Nursing Information Literacy Quality Circle, the CON faculty meetings, and the CON Learning Resources &amp;</li> </ul>

	Information Technology Committee.	Information Technology Committee.
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Objective 9: Provide a system for maintenance, upgrade, training and support of administrative systems for Shreveport Nursing Library in order to better serve students.

Objective 9 Action Plans:

- Obtain feedback from the CON Learning Resources & Information Technology Committee on the needs of CON faculty and students for library services, resources, and technology.
- Seek suggestions from all CON faculty for the acquisition or licensing of library services and electronic resources.
- Coordinate hardware and software maintenance, upgrades, and professional services.
- Provide new hardware and software for specialized functions.
- Provide training to Shreveport Nursing Library personnel and CON faculty and students.
- Provide technical training for Shreveport Nursing Library personnel, all of whom provide for administration and support of library technology and resources.

Objective 9 Action Plan Schedule:

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Utilize existing process for obtaining feedback from the CON Learning Resources &amp; Information Technology Committee on the needs of CON faculty and students for library resources and services.</li> <li>• Replace the oldest faculty, staff, and public service computers.</li> <li>• Provide hardware and software maintenance, upgrades, and professional services.</li> <li>• Provide new hardware and software for specialized functions, such as to the SIRSI UnicornLINK and Ariel software.</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize existing process for obtaining feedback from the CON Learning Resources &amp; Information Technology Committee on the needs of CON faculty and students for library resources and services.</li> <li>• Replace the oldest faculty, staff, and public service computers.</li> <li>• Provide hardware and software maintenance, upgrades, and professional services.</li> <li>• Provide new hardware and software for specialized functions, such as to the SIRSI UnicornLINK and Ariel software.</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize existing process for obtaining feedback from the CON Learning Resources &amp; Information Technology Committee on the needs of CON faculty and students for library resources and services.</li> <li>• Replace the oldest faculty, staff, and public service computers.</li> <li>• Provide hardware and software maintenance, upgrades, and professional services.</li> <li>• Provide new hardware and software for specialized functions, such as to the SIRSI UnicornLINK and Ariel software.</li> </ul>

<ul style="list-style-type: none"> <li>• Provide training for Shreveport Nursing Library personnel and CON faculty and students.</li> <li>• Provide technical training for Shreveport Nursing Library personnel, all of whom provide for administration and support of library technology and resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide training for Shreveport Nursing Library personnel and CON faculty and students.</li> <li>• Provide technical training for Shreveport Nursing Library personnel, all of whom provide for administration and support of library technology and resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide training for Shreveport Nursing Library personnel and CON faculty and students.</li> <li>• Provide technical training for Shreveport Nursing Library personnel, all of whom provide for administration and support of library technology and resources.</li> </ul>
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Objective 10: Institute a technology budget for the Shreveport Nursing Library.

Objective 10 Action Plans:

- Within the library budget process of allocating capital outlay funds according to a collection development formula, examine ways to ensure that the Shreveport Nursing Library has technology resources comparable to other campuses, including access, hardware, software, training, personnel, and facilities.
- Collaborate with CON faculty and the Dean individually and through the CON Learning Resources & Information Technology Committee to decide how best to expend capital outlay funds.
- Submit a technology budget request to the Student Technology Advisory Committee.
- Develop a budget for technology replacement.

Year 1	Year 3	Year 5
<ul style="list-style-type: none"> <li>• Examine ways within the library budget allocation process to ensure that the Shreveport Nursing Library has technology resources comparable to other campuses, including access, hardware, software, training, personnel, and facilities.</li> <li>• Include feedback from</li> </ul>	<ul style="list-style-type: none"> <li>• Implement technology budget, including technology replacement program.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase technology budget.</li> </ul>

<p>CON faculty, the Dean, and the Learning Resources &amp; Information Technology Committee to decide how best to expend capital outlay funds.</p> <ul style="list-style-type: none"> <li>• Submit a technology budget request to the Student Technology Advisory Committee.</li> <li>• Develop a budget for technology replacement.</li> </ul>		
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**Current Use of Technology**

**Existing Technology Environment: Applications, Data, Hardware, Networks, Staffing, Value, Security**

**Applications**

<b>Off-the-Shelf Applications</b>	<b>Number of Licenses</b> (Best estimate, exact number not necessary)	<b>Versions in Use</b> (Optional)
<b>Productivity Suites</b>		
	Microsoft Office Suite	4
	Corel WordPerfect Office	1
	Other (Specify):	17
		Adobe Acrobat Reader (15) Adobe Acrobat Distiller (2)
<b>Internet Browser</b>		
	Microsoft Internet Explorer	15
	Netscape / Mozilla	
	Other (Specify)	

<b>Anti-Virus</b>			
	Symantec/Norton (1 server license, with unlimited clients)	1	Library has 15 clients
	McAfee	0	
	Other (Specify)	0	
<b>E-mail and Calendaring</b>			
	Microsoft Exchange	4	
	Lotus Notes	0	
	Other (Specify)	0	
<b>Database Management (DBMS)</b>			
IBM DB2 or UDB			
	Client Licenses	0	
	Server Licenses	0	
	Mainframe Licenses	0	
Oracle			
	Client Licenses	0	
	Server Licenses	0	
	Mainframe Licenses	0	
Microsoft SQL Server			
	Client Licenses	0	
	Server Licenses	0	
AS/400			
	Licenses	0	
Other (Specify)			
	Client Licenses	0	
	Server Licenses	0	

Other significant off-the-shelf applications utilized by the Shreveport Nursing Library include FrontPage (web page development).

Other significant applications utilized by the Shreveport Nursing Library include Ariel (Interlibrary Loan software that runs on Windows XP).

**Data**

The major database that is maintained by Shreveport Nursing Library personnel is SIRSI UnicornLINK System, which includes a public module (iLINK) and a staff module (WorkFlows), which is a database of detailed catalog records for all books, media,

serials, etc., in the Shreveport Nursing Library (and all NSU Libraries). SIRSI includes WorkFlows database management and maintenance modules for circulation, serials, barcoding of volumes and copies, reserves, and reports as well as a public access online catalog module (iLINK). WorkFlows is only available to library staff, not to the public. iLINK is available to the public as well as to library staff.

Significant electronic data exchanges the Shreveport Nursing Library has with other entities include the following:

- LOUIS Union Catalog that includes the transfer of the NSU Libraries SIRSI catalog database (which includes the data entered by Shreveport Nursing Library staff).
- Online database usage statistics transferred from online vendors (EBSCO, ProQuest, Lexi-Comp, OVID, Wiley/Cochrane Library, OCLC/netLibrary) and LOUIS (the Louisiana Library Network) (administered by Head-Shreveport Division).
- Interlibrary Loan records transferred to and from DOCLINE.
- Interlibrary Loan requests transferred to ILLiad.
- Interlibrary Loan documents transmitted via Ariel.
- Serials claims initiated via EBSCOnet.
- EBSCO AtoZ database that includes the transfer of print and microform holdings into the “NSU Journal List” as well as entering data to set up the database (administered by Head-Shreveport Division).
- EBSCO EJS database includes data entry for the activation of online access of e-journals (jointly administered by the Head-Shreveport Division and the Head-Media/Serials).
- Ingenta document delivery database that includes transmission of requests for journal articles either electronically or by fax as well as data entry to activate online access of e-journals (administered by the Head-Shreveport Division).

## **Hardware**

A general description of the elements of the computing environment (mainframe, midrange, PC workstations, etc.) for the Shreveport Nursing Library is as follows:

4 Desktop computers (staff) running Windows XP Pro  
1 laptop (staff), running Windows 2000  
1 Desktop computer (staff), running Windows NT 4.0  
1 Desktop computer (staff), running Windows 98 2<sup>nd</sup> ed.  
10 Desktop computers (public), running Windows NT 4.0

## **Networks: LANs and WANs**

A general description of the Shreveport Nursing Library's network environment includes the following:

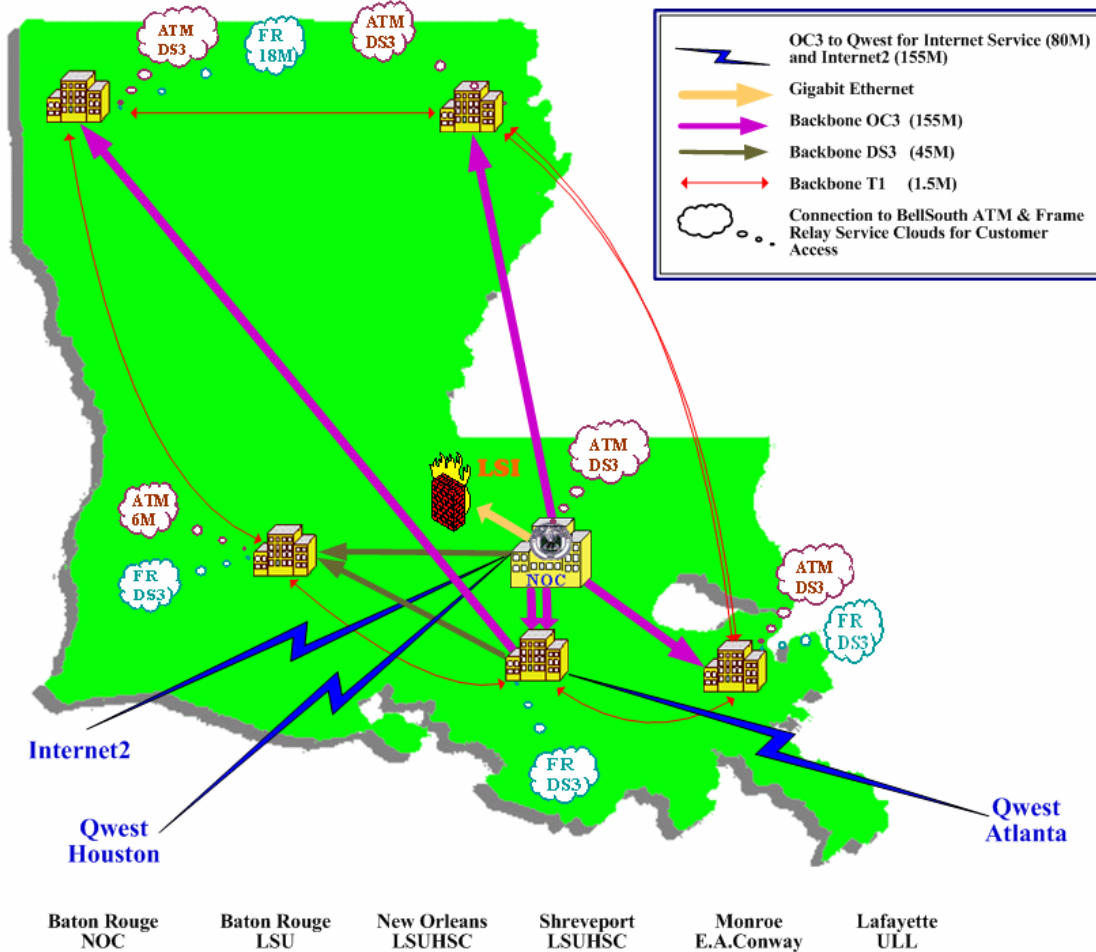
Five staff workstations and 10 public workstations are connected via a 100MB switched Ethernet network. The Shreveport Nursing Library staff and public workstations utilize four servers, operated by CON technology staff, that use Gigabit Ethernet.

Windows 2000 is the system utilized for the student printing workstation and the student shared server (yoda). Windows 2003 is the operating system utilized for the student and faculty servers, operated by CON technology staff and Student Technology staff.

Louisiana's Office of Telecommunications Management provides LaNet T-1 lines as the backbone for Internet transmission (see LaNet map below) for the Shreveport Nursing Library. T-1 lines transmit both ways between servers operated by the LSU Health Sciences Center in Shreveport, the University of Louisiana at Lafayette, the LSU Health Sciences Center in New Orleans, and the E.A. Conway Hospital in Monroe. Access to all library electronic resources depends on the service provided by the LaNet T-1 lines, service that at times is either slow or will not connect.

# LaNet Backbone and Subscriber Map

Select a hub site below to view a listing of LaNet subscribers connecting through that location. (Update 4/8/03)



Retrieved February 23, 2005, from the website of the Louisiana Office of Telecommunications Management at:  
[http://www.doa.state.la.us/otm/lanet/lanetmap\\_files/lanetmap\\_frames.html](http://www.doa.state.la.us/otm/lanet/lanetmap_files/lanetmap_frames.html)

## **Staffing**

The Shreveport Nursing Library staff consists of three full-time unclassified positions, each of which has significant technology-related duties, especially as regards to data input for Circulation, Serials, Reserves, Cataloging, and Reports. The Head-Shreveport Division negotiates license agreements and pricing for electronic resources that support the CON and resolves problems related to online access of those resources.

Positions outside the Shreveport Nursing Library's organizational chart, but which provide significant technology support are included in the organizational structure outlined below.

### **Organizational Structure for Northwestern Technology Support Personnel**

(\* key positions)

Vice President for Academic Affairs

NSU Libraries, Director (located in Natchitoches)

\* Head-Shreveport Division (located in Shreveport)

\* Library Associate (located in Shreveport)

\* Library Associate (located in Shreveport)

Head-Cammie Research Center (located in Natchitoches)

\* Digital Imaging Specialist [Library Webmaster] (located in Natchitoches)

Head-Reference Division (located in Natchitoches)

\* Reference/Government Documents Librarian [LOUIS System Administrator] (located in Natchitoches)

CON, Dean (located in Shreveport)

Director of University Support (located in Shreveport)

\* Network Administrator (Computer Technician) (located in Shreveport)

\* Media Coordinator (Media Services Technician) (located in Shreveport)

President of the University (reorganization under President announced 2/22/2005)

Office of Information Systems, Director (located in Natchitoches)

Director of Technical Services (located in Natchitoches)

\* User Support Supervisor (located in Natchitoches)

User Support Specialist (located in Leesville)

Vice President for Student Affairs (reorganization under VPSA announced 2/22/2005)

Student Technology, Coordinator (located in Natchitoches)

\* Technician (located in Natchitoches)

## **Value of Technology**

The benefits of technology are many, but the most significant to the Shreveport Nursing Library program are the following:

- *Improved ability to provide bibliographic descriptions of library resources via the SIRSI UnicornLINK system. A major feature of SIRSI is the ongoing updating of*

the print holdings statements for journals and the linking of these statements to the “NSU Journal List.”

- *Improved document delivery/interlibrary loan service to CON faculty and students as well as to other libraries.* Most requests for library resources are for journal articles, the vast majority of which are received and delivered by email as a PDF file, by fax, or by the interlibrary loan Ariel software. Relatively few documents are delivered by mail. Although faculty and students are instructed to allow 10 days for delivery, most documents are delivered within a matter of hours to 3 days because of our ability to receive documents electronically.
- *Quicker and more convenient communication* (via e-mail and the Shreveport Nursing Library website) with CON faculty and students, most especially to those teaching or learning through distance education, off-campus, or another campus.
- *Improved ability to maintain a current master list of all full-text journals*, whether in print, microform, or online, with direct links to most e-journal titles and direct links to the online catalog holding statements for print and microform titles.
- *Increased access to more full-text e-journal articles and e-books* that are available 24 hours a day, 7 days a week, to any registered library patron who can access the Internet. Today, CON faculty and students can access more than 2,000 full-text medicine-related e-journals, of which 276 are nursing-specific. Resolving problems pertaining to access is a daily task for all Shreveport Nursing Library staff members, who take the lead role in reporting and following-up on problems reported by CON faculty and students. The Head-Shreveport Nursing Library communicates with publishers, vendors, and Northwestern technology personnel to identify the right one(s) to solve the problem.
- *More reliable statistical data* (e.g., library statistics and electronic usage statistics), generated through the use of spreadsheet calculations instead of hand calculations, through the reports module of the SIRSI Unicorn WorkFlows system, and through the online retrieval from vendors of usage statistics for electronic resources.
- *Higher quality of web-based, printable Shreveport Nursing Library user guides and tutorials*, generated through applications such as MS-Word Office Suite and Adobe Acrobat Distiller.
- *Increased access to pertinent Internet resources*, evaluated for authority by the Head-Shreveport Nursing Library, with links posted to the Shreveport Nursing Library website.
- *More cost-effective use of funds*, brought about by canceling print subscriptions when titles become available in an aggregated database or by converting print subscriptions to electronic when costs are about equal. Electronic subscriptions

provide increased access for CON faculty and students who are not located in Shreveport. Through electronic technology, journal titles that, formerly, were only available in print at Shreveport are now available to all campuses, at often the same cost of a single print subscription.

- *Less need for additional evening and weekend staff* because the Shreveport Nursing Library does not need to be open to provide access to most of the pertinent journal literature, now available 24 hours a day, 7 days a week, via the Internet.

## **Security**

The Shreveport Nursing Library secures the technology environment by having staff present at all times the library is open. Otherwise, the library is locked. Most public service equipment is in plain sight in front of the main Help Desk. Only persons on duty are allowed behind the Help Desk. The three staff offices and work room are locked whenever the library is locked and all others must be accompanied by a staff member to be in these areas. The room where equipment is stored remains locked at all times. Staff members follow the university key policy. Technology personnel configure all staff computers to require a logon and to generate an automatic screen lock after 15 minutes of no use. Technology personnel also install virus software on all computers, and the public is asked not to insert a floppy disk in the public computers. Public computers are configured to disallow downloading and open access to the Internet; the Internet browser address window is shadowed so that the only access to the Internet for the public service computers is clicking on links.

As stated in the university's "Electronic Data Systems Policies and Standards," the Office of Information Systems has final authority over all data processing systems, information technologies, and networks associated with NSU, including the authority to access, evaluate, and/or suspend the operation of a data processing system or network associated with Northwestern State University of Louisiana. (see page 2 in <http://www.nsula.edu/edp/documents/edp.pdf>). The Shreveport Nursing Library observes all applicable security policies established in this document (see Appendix), which include the areas of Access, Backup and Recovery, Securing Hardware/Software, Computer Software (licensing, copying, guidelines), Telecommunication Usage (prohibited, Internet Use, LaNet Use, web pages), User Policy (copyrights and licenses), Integrity of Information Resources, Unauthorized Access, Privacy, Non-University Use, System Administrator Responsibilities, Policy Enforcement, Consequences of Misuse, Student Access/Use Policies, Acquisition of Computer Hardware/Software/Services, Expenditures Requiring Review, and lastly, Data Recovery and Protection from Power Surges and Outages.

## **Disaster Recovery and Business Continuity**

"Disaster Recovery" refers to preparations for restoring information technology systems following a major disruption. The term "Business Continuity" refers to preparations for

restoring the operational functions of the Shreveport Nursing Library. As used here, disaster recovery is a subset of business continuity, because information technology supports the business functions of the library.

Critical data for the Shreveport Nursing Library are the data entered by staff into the SIRSI UnicornLINK System. Backup and Recovery for data entered therein is provided by LOUIS: The Louisiana Network, which provides backup and recovery that ensures no more than a day's loss of data.

Northwestern's Office of Information Systems backs up critical data nightly to facilitate recovery in case of data loss. Source program files, faculty/staff, and student files are backed up weekly. Backup files are secured as originals and comply with the "NSU Backup and Restoration Procedures" maintained by the university's Office of Information Systems.

Backup and restore procedures for personal computers that perform routine work (word processing, e-mail, etc.) are the individual responsibility of Shreveport Nursing Library staff, who must ensure that the files they need to continue their routine work are periodically backed up to enable them to perform their work on another computer in the event of computer failure or data loss. The Office of Information Systems can assist users in establishing individual backup and restore procedures. The CON faculty server backs up all data nightly, then weekly, so that in the event of server failure or data loss, then data from the previous two weeks can be restored. Although not mandatory, Shreveport Nursing Library staff members are asked to back up their data daily on the CON faculty server. Although not mandatory, it is the responsibility of each Shreveport Nursing Library staff member to decide whether or not to back up data throughout the day onto some other storage device (floppy disks, for example) to ensure against loss of data that might occur in the event of failure of their computer or the CON faculty server.

Surge protectors and Uninterruptible Power Supplies (UPS) are recommended for all staff computers where data are created for routine work. Surge protectors are used for all public service computers to provide protection from electrical noise and damaging power surges. As a minimum, all staff computers are equipped with a surge protector. However, UPS devices are preferred for staff computers so that, when a power surge occurs, computers are instantly switched to emergency battery backup power that will allow the system to safely continue to operate through brief power outages or to shut down in the event of an extended outage. As recommended by the Office of Information Systems, surge protectors are not daisy-chained, so as to avoid damage to one or both surge protectors; and laser printers are connected to surge protectors, but not to UPS devices.

## **Reporting and Evaluation**

In keeping with the recommendation of the Northwestern State Technology Enrichment Plan (NSTEP), the Shreveport Nursing Library's Technology Enrichment Plan will be posted to the Shreveport Nursing Library website, along with an invitation to send feedback. The feedback will be incorporated into revisions as they occur.

Each objective, action plan, and initiative will be assessed for its impact with respect to its stated intent. The results of ongoing or summative evaluation will be posted to the Shreveport Nursing Library website. A written annual report will be presented to the Director of Libraries.

### **Funding**

Funding for the Shreveport Nursing Library's Technology Enrichment Plan is expected to come from the following three mechanisms: (1) reallocation of capital outlay funds from the annual appropriation made to the NSU Libraries; (2) an increase in grant funding and "Friends" Library Card fees; and (3) effective stewardship of the Student Technology Fee.

## Appendix

### Pertinent Security Policies

(from the Office of Information Systems,  
Electronic Data Systems Policies and Standards,  
<http://www.nsula.edu/edp/documents/edp.pdf>)

#### 5.3.5 Access Monitoring

Systems will be monitored for unauthorized access attempts, and will restrict repetitive attempts to gain access in order to forestall unauthorized entry.

#### 5.3.6 Electronic Signature

A valid user name and password are required for access to a data system.

#### 5.3.7 Screen Saver

A mandatory password-protected screen saver with a 15-minute activation delay is required for all Windows 2000 and XP-based PCs and is not configurable by the user.

#### 5.3.8 Logon Message

The following message shall be visible to all users before logging into a Windows 2000 or XP-based PC:

This is a Northwestern State University computer system. This computer system, including all related equipment, networks and network devices (specifically including Internet access), are provided only for authorized university use. NSU computer systems may be monitored for all lawful purposes, to include: ensuring that their use is authorized, management of the system, facilitating protection against unauthorized access, and verifying security procedures, survivability and operational security. Monitoring includes active attacks by authorized NSU entities to test or verify the security of this system. During monitoring, information may be examined, recorded, copied and used for authorized purposes. All information, including personal information, placed on or sent over this system may be monitored. Use of this NSU computer system, authorized or unauthorized, constitutes consent to monitoring of this system. Unauthorized use may subject you to criminal prosecution. Evidence of unauthorized use collected during monitoring may be used for administrative, criminal or adverse action. Use of this system constitutes consent to monitoring for these purposes.

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### 5.5 Backup and Recovery from Interruptions

#### 5.5.1 Backup Files

All critical data files will be backed-up nightly to facilitate recovery in case of data loss. All source program files, faculty/staff, and student files must be backed up weekly. All backup files must be secured as originals. Any file backup must be in compliance with the "NSU Backup and Restoration Procedures" maintained by Information Systems.

#### 5.5.2 Offsite Storage

At least one backup should be maintained offsite, for all essential applications.

### **5.5.3 Restoration of Data**

In the event of data loss, files must be restored from the latest backup. Anytime data is restored, a Restoration of Data Log is to be completed. These logs are maintained by Information Systems, and are to show the dates/times of the restoration process, date of backup tape restored from, and person responsible for restoration of data. All data restoration must comply with the "NSU Backup and Restoration Procedures" maintained by Information Systems.

### **5.5.4 Recovery Process**

A disaster recovery process should be in place for all essential systems in order to ensure the ability of the institution to survive business interruptions and to function adequately after an interruption.

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### **5.7 Securing Hardware/Software**

All administrative system computing equipment, programs, files, logs and documents should be kept in physically secure areas in order to provide protection from unauthorized access and acts that would cause hardware or program malfunction. When a workstation is surplus or transferred, it is the responsibility of the budget unit to ensure that there are no data on the hard drive that may be compromised. All files must be removed from the drive(s) before the computer is relocated or reassigned. In addition, licenses for software that remain installed on the computer must move with the computer.

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## **7. Computer Software**

Any software loaded onto university computers must support university business. This includes software purchased by the University or by a University employee or student. Information Systems may remove any software from a system that is not licensed, is deemed inappropriate by the Provost, or that is in any way detrimental to hardware, software, or the University network.

### **7.1 Licensing**

- Regardless of ownership, all software running on University computers must be licensed.
- Licensing documentation will be secured and available for review upon demand.
- University technical or support personnel will not load or transfer licensed software without proof of license.
- Information Systems may remove from a computer any software that is not licensed.

### **7.2 Copying Of Computer Software**

Unlawful software copying is not permitted. Vice-Presidents, department heads, and directors are charged with ensuring that University faculty, staff and students are aware of and observe restrictions against unauthorized copying and use of computer software, as provided in the attached guidelines.

### **7.3 Guidelines**

- Scope of Policy: The prescription against unlawful software copying applies to all faculty, staff and students. The policy applies equally to all software computing devices.

- Sanctions for Violation: Disciplinary steps will be taken against individuals violating this policy in the course of University related activities, or using University facilities to conduct or assist in unlawful copying, under the procedures appropriate to students, staff, or faculty as the case may be. For example, unlawful copying would be considered misconduct by members of the University staff, and in appropriately severe circumstances could result in discharge for cause.
- Responsibility for Compliance:
  - When the University acquires software, the using budget unit is responsible for reading and adhering to the terms of the license agreement and preventing unauthorized copying.
  - When the University acquires software, the budget unit making the purchase is responsible for maintaining records necessary to show ownership of the software (i.e., purchase orders, manuals, and original diskettes/CD's as provided by the software vendor.)
  - Supervisors should ensure that employees and other persons having access to software are advised of restrictions and do not make copies without permission.
  - Software purchased by individuals is the responsibility of the individual. Persons who knowingly aid in unauthorized copying also may be liable. (e.g., by loaning software to another person with the intent that the borrower will make an unauthorized copy, or by knowingly allowing one's computer to be used for making an unauthorized copy.)
- Notification: Copies of this policy and these guidelines shall be made available through the university web page, in the university library, and upon request through the Provost's office and the Office of Student Affairs. Also, all Vice Presidents, Deans, and Department Heads will be provided a copy of the document. Supervisors are charged with ensuring that applicable employees are aware of this policy. Additionally, the following actions should be taken:
  - Self-service Microcomputers: All University self-service microcomputers (e.g., those in the libraries available for patron use) shall have on them, or nearby and visible to the user, a notice stating that unlawful copying is prohibited. The suggested form for such notice is: NOTICE: Copying software or documentation may be subject to the Copyright Law. Unlawful copying is prohibited.
  - Software: Lending Libraries: University software lending libraries shall undertake appropriate measures to ensure that patrons are advised that copying of the loaned software is prohibited (unless the software is in the public domain or the owner has consented to copying). Such steps shall include all or some of the following: signed statements by the borrowers, posted signs, labels on software and documentation, and warnings displayed on the computer screen.

- Software Labels: Supervisors shall ensure that labels and notices prohibiting copying are not removed from software acquired by the University and that copies lawfully made include duplication of such labels and notices.

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**9. Telecommunication Usage Policy/Procedures**

Telecommunication resources at Northwestern State University are provided for the use of students, faculty and staff to help carry out the mission of the University. The University encourages and promotes uses of telecommunication resources by the University community that support this mission.

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Northwestern State University generally provides users access to computer services such as electronic mail and the Internet twenty-four hours a day, seven days a week. (The University reserves the right to bring these services down for maintenance as needed.)

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**9.3.2.2 Prohibited Uses include**

Prohibited uses are as follows:

- Use for personal or for-profit activities.
- Use by friends, family members, relatives, or others not officially affiliated with and authorized by the University. The NSU networks, including its dial-in lines, are not available as a substitute for private Internet service providers.
- Any use that is likely, or intended, to cause unauthorized network disruption, system failure, or information loss.
- Any use related to achieving, enabling, or hiding unauthorized access to systems, software, or information either within or outside NSU.
- Direct dial-up to a computer or network device connected to the university network without going through the University modem bank.
- Any use which violates Northwestern EDP Administrative Policies.

**9.3.3 Internet Use Policy**

Northwestern State University subscribes to its Internet Service Provider's Use Policy as follows: The use of University network facilities, including the NSU network for Internet access, for any reason other than for University related activities, is strictly forbidden. Violators may lose access to University facilities and/or the University network and be subject to state or federal civil or criminal penalties.

**9.3.4 LaNet Use Policy**

LaNet exists for the primary purpose of transmitting and sharing information among governmental and educational organizations within Louisiana. Transmission of any material in violation of any federal or state laws or regulations is prohibited. LaNet connections shall not be used to access other devices without the permission of the owner. The Subscriber agrees to observe the acceptable use policy of any other network the Subscriber accesses through LaNet. LaNet subscribers are expected to be responsible in their use of the network and avoid actions that cause interference to the network or

cause interference with the work of others on the network.

**9.3.4.1 LaNet Use Policy for Internet Access**

*LaNet provides access to the Internet for the primary purpose of transmitting and sharing of information among governmental, research and educational organizations. Transmission of any material in violation of any federal or state laws or regulations is prohibited. Internet connections shall not be used to access other machines without the permission of the owner. The Subscriber agrees to observe the acceptable use policy of any other network the subscriber accesses through LaNet. LaNet subscribers are expected to be responsible in their use of the network and avoid actions that cause interference to the network or cause interference with the work of others on the network.*

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**9.3.6.9 University Web Pages**

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To go beyond 4 levels (5 at most) of pages is considered to be a poor design.  
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**9.10 User Policy Summary**

Users of University information resources must respect software copyrights and licenses, respect the integrity of computer-based information resources, refrain from seeking to gain unauthorized access, and respect the privacy of other computer users. This policy is applicable to all University students, faculty, and staff and to any others granted use of Northwestern State University resources. This policy refers to all University information resources whether individually controlled or shared, stand-alone or networked. It applies to all computer and computer communication facilities owned, leased, operated, or contracted by the University. This includes word processing equipment, personal computers, workstations, mainframes, minicomputers, and associated peripherals and software, regardless of whether used for administration, research, teaching, or other purposes.

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**9.14 Governing Policies**

Note: Any user of University information resources who is found to have purposely or recklessly violated any of the following policies will be subject to disciplinary action up to and including discharge, dismissal, expulsion, and/or legal action.

**9.14.1 Copyrights and Licenses**

Copying: All software protected by copyright must not be copied except as specifically stipulated by the owner of the copyright or otherwise permitted by copyright law. Protected software may not be copied into, from, or by any University facility or system, except pursuant to a valid license or as otherwise permitted by copyright law.

Number of Simultaneous Users: The number and distribution of software copies must be handled in such a way that the number of simultaneous users in a department does not exceed the number of original copies purchased by that department, unless otherwise stipulated in the purchase contract.

Copyrights: In addition to software, all other copyrighted information (text, images, icons, programs etc.) retrieved from computer or network resources must be used in conformance with applicable copyright and other law. Copied material must be properly attributed. Plagiarism of computer information is subject to the same sanctions as apply to plagiarism in any other media.

#### **9.14.2 Integrity of Information Resources**

Modification or Removal of Equipment: Technology users, including faculty, students, and staff, may not, in anyway, modify, dismantle, or remove computer or network equipment, software, or peripherals that are owned by the University/State without proper authorizations. Absolutely no modification may be made to any computer, or peripheral, or network device without the permission of Information Systems and University Property Control unit.

Encroachment on Access and Use: Computer users must not encroach on others' appropriate access to, or use of, University computer or network devices. This includes but is not limited to: the sending of chain-letters or excessive messages, either locally or off-campus; printing excess copies of documents, files, data, or programs; running grossly inefficient programs when efficient alternatives are known by the user to be available; unauthorized modification of system facilities, operating systems, or disk partitions; attempting to crash or tie up a University computer or network, and damaging or vandalizing University property.

Unauthorized or Destructive Programs: Computer users must not intentionally develop or use programs which disrupt network or computer use, or which access private or restricted portions of a system and/or damage the software or hardware components of a system. Computer users must use great care to ensure that they do not use programs or utilities that interfere with other computer users or which modify normally protected or restricted portions of the system or user accounts. Computer users must not use network links for any use other than those permitted in the network guidelines.

Academic Pursuits: The University recognizes the value of research on game development, computer security, and the investigation of self-replicating code. The University may restrict such activities in order to protect University and individual computing environments, but in doing so will take account of legitimate academic pursuits.

#### **9.14.3 Unauthorized Access**

Abuse of Computing Privileges: Users of University information resources must not access computers, computer software, computer data or information, or networks without proper authorization, or intentionally enable others to do so, regardless of whether the computer, software, data, information, or network in question is owned by the University. For example, abuse of the networks to which the University belongs or the computers at other sites connected to those networks will be treated as an abuse of Northwestern State University computing privileges.

Reporting Problems: Any defects or abuse discovered in system accounting or system security must be reported to the appropriate system administrator so that steps can be taken to investigate and solve the problem.

Password Protection: A computer user who has been authorized to use a password-protected account may be subject to both civil and criminal liability if

the user discloses the password or otherwise makes the account available to others without permission of the system owner.

#### **9.14.4 Privacy**

Computer users must respect the privacy of other computer users. The University system provides mechanisms for the protection of private information from examination by others. Attempts to circumvent these mechanisms in order to gain unauthorized access to the system or to private information are violations of University policy and may violate applicable law. System administrators, with authorization from the Director of Information Systems, may access computer users' files for critical maintenance purposes or in response to suspected policy violations. System administrators will report suspected unlawful or improper activities to the Director of Information Systems.

Unlawful Messages: Use of electronic communication facilities (such as mail or chat, or systems with similar functions) to send fraudulent, harassing, obscene, threatening, or other messages that are a violation of applicable federal, state, or other law or University policy is prohibited.

Mailing Lists: Users must respect the purpose and charters of computer mailing lists (including local or network newsgroups and bulletin boards). The user of an electronic mailing list is responsible for determining the purpose of the list before sending messages to or receiving messages from the list. Subscribers to an electronic mailing list will be viewed as having solicited any material delivered by the list as long as that material is consistent with the list's purpose. Persons sending to mailing list any materials that are not consistent with the list's purpose will be viewed as having sent unsolicited material.

Advertisements/solicitations: In general, the University's electronic communication facilities should not be used to transmit commercial or personal advertisements, solicitations, or promotions (See Commercial Use, below)

Information Belonging to Others: Users must not intentionally seek or provide information on, obtain copies of, or modify data files, programs, or passwords belonging to other users without the permission of the other user and, where applicable, the permission of the system administrator and Director of Information Systems.

Confidentiality: The University does not exist in isolation from other communities and jurisdictions and their laws. Under some circumstances, as a result of investigations, subpoena or lawsuits, individual users or the University may be required by law to provide electronic or other records or information related to those records or relating to use of information resources.

#### **9.14.5 Political, Personal, and Commercial Use**

The University is a non-profit, tax-exempt organization and, as such, is subject to specific federal, state and local laws regarding sources of income, use of real estate, and similar matters. It is also a contractor with government and other entities and thus must assure proper use of property under its control and allocations of overhead and associated costs. Use of the University information resources, including the use of the University computer network capabilities, is, therefore, subject to the following conditions:

Political Use: University information resources must not be used for partisan political activities where prohibited by federal, state or other applicable laws, and may be used for other political activities only when in compliance with federal state and other laws and in compliance with applicable University policies.

Personal Use: University information resources may not be used for personal activities not related to University functions.

Commercial Use: University information resources should not be used for commercial purposes except in a purely incidental manner or as permitted under other written policies of the University or with the written approval of a University officer having the authority to give such approval. Any such commercial use should be properly related to University activities, take into account proper cost allocations for government and other overhead determinations and provide for appropriate reimbursement to the University for taxes and other costs the University may incur by reason of the commercial use. Users also are reminded that the "EDU" domain on the Internet has rules restricting or prohibiting commercial use.

### **9.15 System Administrator Responsibilities**

While the University of Louisiana System is the legal "owner" or "operator" of all computers and networks purchased or leased with University funds, oversight of any particular system is designated to the head of a specific subdivision of the University governance structure, such as a Dean, Department Chair, Administrative Department Head, Principal Investigator, etc. For University-owned or leased equipment, that person is the responsible administrator of the policies in this document. The responsible administrator may designate another person to manage the system. This designee is the "system administrator". The system administrator has additional responsibilities to the University as a whole for the system(s) under his/her oversight, regardless of the policies of his/her department or group, and the responsible administrator has the ultimate responsibility to see that the designated system administrator carries out these responsibilities. The system administrator should use reasonable efforts:

- To take precautions against theft of, or damage to the system components.
- To execute all applicable hardware and software licensing agreements.
- To treat information about, and information stored by, the system's users in an appropriate manner, and to take precautions to protect the security of a system or network and the information contained therein.
- To promulgate information about specific policies and procedures that govern access to and use of the system, and services provided to the users or explicitly not provided. This information should describe the data backup services, if any, offered to the users. A written document given to users or messages posted on the computer system itself shall be considered adequate notice.
- To cooperate with the system administrators of other computer systems or networks, whether within or without the University, to find and correct problems caused on another system by the use of the system under his/her control.
- To enforce applicable University EDP policy

**9.15.1 Policy Enforcement**

The system administrator is authorized to take reasonable action to implement and enforce the usage and service policies of the system and to provide for security of the system.

**9.15.2 Suspension of Privileges**

A system administrator may temporarily suspend access privileges if he or she believes it necessary or appropriate to maintain the integrity of a computer system or network. The Director of Information Systems has ultimate authority for policy enforcement over all systems owned by or associated with Northwestern State University.

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**9.17 Consequences of Misuse of Computing Privileges**

**9.17.1 Cooperation Expected**

Users, when requested, are expected to cooperate with system administrators in any investigations of system abuse. Users are encouraged to report suspected abuse, especially any damage to or problems with their files. Failure to cooperate may be grounds for cancellation of access privileges, or other disciplinary actions.

**9.17.2 Corrective Action**

- If system administrators have persuasive evidence of misuse of computing resources, and if that evidence points to the computing activities or the computer files of an individual, they should pursue one or more of the following steps, as appropriate, to protect other users, data files, and the computer network:
- Provide notification of the investigation to the Director of Information Systems, Vice President of Student Affairs (in the case of student use), the user's instructor, department or division chair, and/or supervisor.
- Temporarily suspend or restrict the user's computing privileges during the investigation. A student may appeal such a suspension or restriction and petition for reinstatement of computing privileges through the Dean of Students. A staff member may appeal through applicable grievance procedures. Faculty members may appeal through the Dean of their college. The Provost, in consultation with the Director of Information Systems, will make final decisions for reinstatement. With authorization from the University's Computer Security Officer or designate, inspect the user's files, diskettes, tapes, network use logs, and/or electronic account(s).
- Refer the matter for possible disciplinary action to the appropriate University unit, i.e., the Vice President of Students for students, the appropriate supervisor for staff, and the Dean of the relevant College for faculty or other responsible teaching or research personnel.

**9.18 Student Access/Use Policies**

The use of University computer/network facilities, including the NSU network for Internet access, for any reason other than for University related activities, is strictly forbidden. Violators may lose access to University facilities and/or the University network and be subject to state or federal civil or criminal penalties. For policy violations involving a student, referring the case to the Director of Information Systems and to the Vice President of Student Affairs Office is the

recommended course of action. This ensures that similar offenses may be considered for similar disciplinary action, from semester to semester, year to year, and instructor to instructor. It also allows the detection of repeat offenders.

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**11. Acquisition of Computer Hardware, Software, and Services**

Information System's Technical Support and Review Committee (TSRC) will review all proposed purchases of data processing, or other information technologies, including computer hardware, software, peripherals or networking devices in order to ensure: (a) that acquisitions will satisfy the need, (b) completeness of the request; (c) compatibility of hardware/software, and (d) supportability. It is not the purpose of the committee to thwart purchases/grants but rather to assure their technical quality and appropriateness. The Technical Support and Review Committee is composed of the technical staff employed by Information Systems and works in cooperation and consultation with the unit making the purchase request. The committee will meet every Tuesday and Thursday to review purchase requests and grant applications. All purchase requisitions (PRs) and grant applications involving any information technologies must be approved through Information System's Technical Support and Review Committee. Grant applications will be routed to the Technical Support and Review Committee through Grants and Contracts. (Grant applicants are advised to discuss the technical aspects of a grant well in advance. The Technical Support and Review Committee will not be responsible for delays in grant process if adequate time is not provided for review and possible modification of the grant application.) Upon approval by the committee, the PR/grant application will be forwarded to the appropriate agent for signature approval. Business Affairs will not accept any purchase requisition for information technology that has not been pre-approved by the Technical Support and Review Committee.

**11.1 Expenditures Requiring Review**

The following technology commodities/services have been identified by expenditure object code as those requiring review and approval through the Technical Support and Review Committee (TSRC) prior to submittal to Business Affairs/Purchasing Section for processing:

- 3330 Maintenance of Data Processing Equipment: Maintenance and minor repair of data processing equipment performed by an outside agent or agency, includes service contracts and repair on/for personal computer systems and Computer Center hardware, including peripherals and systems software.
- 3430 Rentals - Data Processing Equipment: Rentals and/or lease of data processing equipment for offices and Computer Center.
- 3435 Computer Software: Cost incurred in the acquisition of computer software, when purchased separately from computer hardware.
- 3513 License Fees: Software license fee, taping license, broadcasting fee, etc.  
Telephone & Telegraph: All charges included in the Standard bill for telephone services. This would include standard state services, local and

- LINC; business services, local and long distance; cellular services; and 800 services.
- 3711 Telephone - Local Service: Charges for local service.
- 3712 Telephone - Long Distance Service: Charges for long-distance service.
- 3713 Telephone - Linc Charges: Linc Service.
- 3714 Telephone - Service Contract: Charges for service contract on maintenance of University telephone systems.
- 3715 LA NET/LA Linc: Charges for LA NET/LA Linc service.
- 3716 Data Lines and Circuits: Any charges for data lines, circuits, and Wide Area Networks.
- 3719 Telephone - Other: Other charges for maintaining the University's telephone systems, not otherwise specified.
- 3720 Telephone Base Charge: Base charge for telephone usage.
- 3730 Telegraph: Charges for telegraph, teletype, fax charges, etc.
- 3740 Other Communication Services: Charges for other services other than telephone, and data line or circuits that include radio paging, OTM credit card, etc.
- 3985 Transponder Time: Charges for transponder time.
- 4470 Computer Supplies (Technology): Supplies used to upgrade and/or monitor a system's hardware or peripherals. For example: motherboards, processors, memory, power supply, Ethernet cards, sound cards, SCSI devices, CD-ROM, internal zip drives, internal modems, CD units hubs, keyboards, external zip drives, external modems, etc.
- 5775 Computer Related Consulting: Professional services contracts for networking services, including consulting.
- 7260 Medical: Equipment used in the treatment or diagnosis of sick or injured, including veterinary equipment, and veterinary & medical equipment with computer related operation. Cost would include purchase price, delivery charges, taxes, installation charges and other purchase-related costs.
- 7275 Computers (Purchases over \$250): Computer hardware, including peripherals. Common items are: computers, scanners/all in one, printers, UPS, hubs/SCSI devices, routers, photographic/digital cameras, etc.
- 7280 Educational, Recreational & Cultural: Equipment used for educational, recreational or cultural enrichment. Common items are: overhead projectors, artifacts for museums, pool tables, weights, TVs, VCRs, musical instruments, video servers, smart boards; and any video/audio/classroom equipment that is connected to computers. Cost would include purchase price, delivery charges, taxes, installation charges and other purchase-related costs.
- 7310 Communications: Equipment used for communications such as radios, antennas, teletype machines, aircraft guidance systems, satellite equipment, telephone system add-ons, etc. Costs would include purchase price, delivery charges, taxes, installation, microphones, and other purchase-related costs.

## **12. Data Recovery and Protection from Power Surges and Outages**

### **12.2 Backup and Restore**

#### **12.2.4 Personal Computers.**

Backup and restore procedures for Personal Computers (PCs) that perform routine work (word processing, e-mail, etc.) are an individual responsibility. Individuals should ensure that the files needed to continue their routine work are periodically backed up to enable them to perform their work on another PC in the event of PC failure or data loss. Information Systems can assist users in establishing individual backup and restore procedures.

#### **12.3 Protecting Data from Power Surges and Outages.**

Power surges and unexpected power outages can potentially result in damage to hardware and the loss or corruption of data. Protection from these events may be provided through the use of surge protectors and Uninterruptible Power Supplies (UPS). Surge protectors provide protection for computers from electrical noise and damaging power surges. UPS instantly switches a computer to emergency battery backup power and allows the system to safely continue to operate through brief power outages or to gracefully shut down the system in the event of an extended outage. Information Systems can provide assistance in recommending a proper UPS or surge protector. *There is a wide variety of surge protectors. Some afford extremely limited protection and others provide an optimum level of protection. Surge protectors should never be daisy chained as one or both surge protectors may be severely damaged. Laser printers should not be connected to an UPS device.*

#### **12.3.3 Personal Computers.**

As a minimum all NSU PCs will be equipped with a surge suppressor.