Course Management and Web Integration

**Purpose:** Funding will support the implementation of an enterprise-wide Web based information system to support faculty and students in the academic mission of the University. This new online environment will offer faculty a uniform and easy to use means of putting course material online. It will also offer the university community a uniform web presence for distributing information and communicating within clubs, organizations, units, committees and programs. It will offer the entire university community of faculty, staff and students an appealing, easy to use interface to university information and communication opportunities. It will offer individual faculty members, students and staff the opportunity to have customized information screens (portals) for giving academic, administrative, and activity information.

2003-2005: Expand and enhance implementation of course management and web integration system.

**Cost:** $345,000/2001-2003 biennium

**Fit with Priorities:**

*State of the State:* The implementation of campus wide course management software will provide an integration of information and data bases for faculty, staff and students thus enhancing the teaching and learning environment as well as opening new methods for sharing information throughout the campus. This enterprise-wide academic information system is responsive to state of North Dakota goals including: lifelong learning through an increased presence of courses in educational materials on the web; quality of life through easier access to information and campus communication throughout the university community; and responsive government by having a single, predictable source for all academic information and university communication.

- Lifelong Learning
- Quality of Life
- Responsive Government

*Legislative Cornerstones:* A course management tool that will assist faculty in the development of courses utilizing a multi-media approach. These courses will provide greater access to courses and programs. This academic information system is responsive to legislative council cornerstones including: educational excellence by providing high quality state-of-the-art network environment for the conduct of teaching and learning and other educational communication; accessible programs by providing a new online academic presence over the Internet; and sustaining a 21st Century vision by encouraging electronic education and communication across campus.

- Educational Excellence
- Accessible Programs
Funding of Priorities

North Dakota University System Strategic Plan 1998-2004: Developing and designing course management systems that support instruction and the sharing of campus information systems, will enhance the learning environment as well as expose the campus to appropriate use of technology. This implementation has the potential to unify the campus and provide on-line services in the recruitment of students and interaction with alumni as well as research and instruction on campus. North Dakota University System Strategic Plan 1998-2004: Developing and designing course management systems that support instruction and the sharing of campus information systems, will enhance the learning environment as well as expose the campus to appropriate use of technology. This implementation has the potential to unify the campus and provide on-line services in the recruitment of students and interaction with alumni as well as research and instruction on campus.

Education Excellence
Technology and Access

Strategic Program Development for Multi-Media Courses and Programs

Purpose: Funding will support the development of academic courses and programs that respond to on and off campus needs. This effort will result in funding new ways of developing, designing and delivering courses and programs that can be shared with other NDUS institutions through statewide workshops and seminars. In addition, having more UND programming on-line opens up greater possibilities for collaboration with other NDUS institutions.

Planned Emphasis:

2001-2003: A pool of dollars will be available on a competitive basis for the development of courses and programming and faculty incentives. Appropriate personnel will also be hired to assist with faculty development in the design and delivery of courses and programming.

2003-2005: Faculty development efforts will be expanded to assist more interested faculty as well as expanded program development to meet the needs of new market niches.

Cost: $325,000/2001-2003 biennium

Fit with Priorities:

State of the State: A technology system is only as good as the programming it delivers. Providing appropriate faculty development experiences with the development of on-line courses will enhance on and off campus instruction as well as expanding the access of courses and programs on and off campus.

Lifelong Learning
Economic Prosperity
Responsive Government

Legislative Cornerstone: The core of a university experience is the teaching and learning environment. The use of the Internet can enhance this environment if utilized appropriately. Providing faculty development in the design of courses that use the Internet will help assure that these courses are of highest quality as well as making them available to a larger audience. Legislative Cornerstone: The core of a university experience is the teaching and learning environment. The use of the Internet can enhance this environment if utilized appropriately. Providing faculty development in the design of courses that use the Internet will help assure that these courses are of highest quality as well as making them available to a larger audience.

Economy
Educational Excellence
Accessible Programs
Funding of Priorities

North Dakota University System Strategic Plan 1998-2004: Our North Dakota work force must have access to higher education and to relevant programs. To provide new programming, venture capital will be needed to launch new programs that can benefit both on and off campus students. In addition, faculty development
experiences that assist faculty in the use of technology, will enhance the learning of students.

Education Excellence

Relevant Programs

**Campus Network**

**Purpose:** Funding will provide backbone redundancy, higher bandwidth networking for classroom, office and lab, and portable network access.

**Planned Emphasis:**
- 2001-2003: Install gigabit campus backbone and higher network speed building equipment to improve campus network reliability and performance and install wireless where needed for portable network access.
- 2003-2005: Improve campus network to 99.999% reliability and extend network connectivity to ubiquitous network access on campus.

**Cost:** $200,000/2001-2003 biennium

**Fit with Priorities:**
*State of the State:* Improving the campus network provides infrastructure for campus servers to offer courses and programs for personal and career development to residents of the state. The network also provides access to the information and other resources that residents require.

Lifelong Learning

Quality of Life

Responsive Government

*Legislative Cornerstones:* Improving the campus network provides more reliable and faster access to academic programs and courses. Network improvements are high priority because an advanced campus network is required to meet learning and research priorities. Network improvements are high priority because an advanced campus network is required to meet learning and research priorities.

Accessible Programs

**Research/Support Services**

**Purpose:** Funding will provide support services for research on UND campus including access to high performance computing and
Planned Emphasis:
2001-2003: Purchase equipment and hire personnel to provide additional help desk support as well as a technical consultant for researchers using high performance computing and high bandwidth networking.
2003-2005: Expand services available to campus.

Cost: $270,000/2001-2003 biennium

Fit with Priorities:
State of the State: Assisting researchers with equipment and people allow them to more efficiently develop research proposals and to find IT resources for their research. They can then spend more time on their research, which has potential to turn into products and services. Help desk support will offer more responsive technical information and assistance to local and remote constituents.

Quality of Life
Legislative Council Cornerstones: Research is a high priority in part because of its economic impact and because of its role in encouraging a thriving learning environment. It is a key component in the University System being responsive to government and industry needs.

Voice IP

Purpose: Funding will offset costs to begin testing of Phase 1 implementation of voice using the Internet Protocol on the data networks.

Planned Emphasis:
2001-2003: Upgrade, implement and fully test Voice IP

Cost: $40,000/2001-2003 biennium

Fit with Priorities:
State of the State: This is the beginning of NDUS testing for convergence of voice, data, and video into one network. A converged voice, data, video capable network will allow true multi-media communications that will enhance quality of life, and governments capability to respond to the needs of constituents.

Responsive Government
multi-media communications consisting of converged voice, data, and video is a high priority in meeting the needs for learning and research.

Funding Priorities

North Dakota University System Strategic Plan 1998-2004: Having access to a network where voice, data, and video are converged in one digital signal as multi-media communications will enhance access to information for the whole user community. The ability to communicate with others using all three forms of communications at the same time will enrich the learning experience. A network with multi-media capabilities will enhance communications and collaboration for students, researchers, faculty, staff, and administrators in both the local and remote environments. North Dakota University System Strategic Plan 1998-2004: Having access to a network where voice, data, and video are converged in one digital signal as multi-media communications will enhance access to information for the whole user community. The ability to communicate with others using all three forms of communications at the same time will enrich the learning experience. A network with multi-media capabilities will enhance communications and collaboration for students, researchers, faculty, staff,

Technology and Access
Leadership in Research
Collaboration

Video Conferencing

Purpose: Funding will expand on-campus video conferencing capabilities to meet increasing and operational demands. The established presence of core video conferencing facilities and the ever present geographic challenges of educating students and involving faculty throughout the state have generated a continuously growing need for the expansion of video conferencing capabilities. Highly flexible and easy to use video conferencing technologies are now available. This funding for this project will purchase four economical video conferencing setups and sufficient technical personnel to support installation, operation and training.

Planned Emphasis:

2001-2003: Deployment of four video conferencing systems in development of teaching support capabilities.

2003-2005: Deployment of four video conferencing systems in development of faculty training in the advance use of this instructional delivery system. Develop H.323 video conferencing capability in classrooms, labs and meeting rooms for shared instruction and collaboration with any site which has Internet access with adequate bandwidth.

Cost: $96,000/2001-2003 biennium

Fit with Priorities:

State of the State: The State of North Dakota provides video conferencing to limited sites in North Dakota through the IVN network. Adding video conferencing sites to under-served communities will enhance the learning opportunities for these communities positively impacting lifelong learning and providing higher education opportunities that will positively impact the local economy. This expanded video conferencing capability is relevant to state-of-the-state goals including: lifelong learning through the expanded availability on-campus of state-of-the-art video conferencing courses that can distribute information via IVAN, the switch telephone network and the Internet to learners throughout the state and throughout life; economic prosperity by delivering instructions directly to communities with educational needs; quality of life by allowing students to stay close to their home or workplace and still receive instruction.

Lifelong Learning
Economic Prosperity
Responsive Government

Legislative Cornerstones: The educational needs of our North Dakota communities are growing as business and industry must have access to relevant information as well as technology literate workers. Flexible video conferencing units will provide ready access to North Dakota communities and businesses to up-to-date information and programming for their workers. This expansion of video conferencing capabilities is also responsive to the university system goals: educational excellence through educational redesign of courses for teleconferencing and faculty development in the use of these kinds of technology based delivery systems; technology and access through the capabilities of originating programming anywhere on campus and distributing it to any teleconferencing site in the state; learning environment by providing an up-to-date video, graphical, and audio capabilities to enhance instructional delivery;
collaboration by adhering to the state-wide standard protocol for video conferencing (H.323) on-campus technologies that will be fully compatible with other educational video conferencing sites.

Flexible and Responsive University System
Accessible Programs
21st Century

North Dakota University System Strategic Plan 1998-2004: Access to education is one of the major influences when a business considers moving to a new community. Having access to a flexible and cutting edge video conferencing system will assist UND in providing greater access to our programs as well as providing relevant experiences for faculty and students in the use of new technologies.

Technology and Access
Relevant Programs