

DEPARTMENT OF INFORMATION TECHNOLOGY

www.olec.edu/local_links/it

James Dudek, M.A., Chairperson
Joanne (Susie) White Thunder, Ed.D.
Vacancy

STATEMENT OF VISION

Information Technology Department graduates will demonstrate mastery of information technology and network administration using technologies and best practices that are foundational and applied industry wide.

STUDENT LEARNING OUTCOMES AND OBJECTIVES

The Information Technology Department is committed to the attainment of our vision. Assessment of student learning outcomes and skills is mission critical. We currently evaluate the student learning outcomes in our baccalaureate degree and our service to OLC General Education.

We assess student learning through classroom assignments, hands-on labs and guided internships. Additional information concerning assessment may be obtained by contacting the Department Chairman or the IT Web Site.

DEGREES OFFERED

Associate of Arts in Information Technology is a two-year degree designed to provide the necessary knowledge and skills to become a successful IT technical professional. This degree provides the opportunity to choose one of two options; Information Technology Option and Management Information Systems Option.

The AA in Information Technology will transfer into our four-year Bachelor of Science Degree in Information Technology, transfer to an IT degree at another four-year institution, or to advance employment opportunities.

The **Bachelor of Science in Information Technology** is a four-year degree that offers the opportunity for personal and career advancement in the IT field. This field has experienced a shortage of IT professionals over that past several years and the Pine Ridge Reservation is no exception. The Bachelors Degree in Information Technology will give students the necessary background and experience in one of two options. **Information Technology Option** area specializes in networking, support, and maintenance to prepare the student for a career as an IT Systems Engineer. **Management Information Systems Option** specializes in database design, development and maintenance to prepare the student for a career as a Database Administrator.

Associate of Applied Science in Office Software Applications is a vocational training program designed to provide the student a variety of hands-on learning labs and the necessary skills to achieve in a business or government career. This degree is a terminal program and is does not transfer credits toward a higher degree. Also offered is a **One-Year Certificate in Office Software Applications**.

INFORMATION TECHNOLOGY DEPARTMENT

Bachelor of Science Degree in Information Technology

Core Requirements: (28 Credit Hours)		Cr Hr	Where Taken	Date	Grade
CoSu 103*	College Success	3	_____	_____	_____
Engl 103	Freshman English I	3	_____	_____	_____
Sci 113*	Technical Writing	3	_____	_____	_____
SpCm 103	Speech Communications	3	_____	_____	_____
Math 154*	College Algebra (or above)	4	_____	_____	_____
_____	Science Elective	3	_____	_____	_____
_____	Literature Elective	3	_____	_____	_____
Psy 103	General Psychology	3	_____	_____	_____
_____	Humanities Electives	3	_____	_____	_____
Lakota Studies Requirements: (15 Credit Hours)					
Lak 103	Lakota Language I	3	_____	_____	_____
Lak 233*	Lakota Language II	3	_____	_____	_____
Lsoc 103	Lakota Culture		_____	_____	_____
_____	(or LHist 203 Lakota History I)	3	_____	_____	_____
_____	Lakota Studies Elective	3	_____	_____	_____
_____	Lakota Studies Elective	3	_____	_____	_____
IT Core Requirements (42 Credit Hours)					
IT 103	Theory of Computational Devices	3	_____	_____	_____
IT 153*	Survey of Operating Systems	3	_____	_____	_____
IT 203*	Programming	3	_____	_____	_____
IT 224*	PC Design and Assembly	4	_____	_____	_____
IT 243*	Introduction to Networks	3	_____	_____	_____
Math 263*	Discrete Structures	3	_____	_____	_____
IT 273*	Business Information Systems Management	3	_____	_____	_____
IT 290a	Internship in Information Technology	1	_____	_____	_____
IT 290b	Internship in Information Technology	1	_____	_____	_____
Program Electives (21 Credit Hours)					
GIS 313	Applications of GIS	3	_____	_____	_____
GIS 313	Remote Sensing	3	_____	_____	_____
EnS 213	Scientific Application of		_____	_____	_____
_____	Spreadsheets and Databases	3	_____	_____	_____
Math 194*	Calculus I	4	_____	_____	_____
Bad 253	Principles of Management	3	_____	_____	_____
Bad 343*	Decision Support Systems	3	_____	_____	_____
IT 303*	Introduction to UNIX	3	_____	_____	_____
IT 313*	UNIX Shell Programming	3	_____	_____	_____
IT 353*	Internet Technologies	3	_____	_____	_____
IT 383*	Current Topics in Information Technology	3	_____	_____	_____
IT 393*	Implementing and Administrating Mail Servers	3	_____	_____	_____
IT 414*	Advanced NT	4	_____	_____	_____
IT 433*	Supporting Windows NT Workstation	3	_____	_____	_____
IT 443*	Advanced UNIX	3	_____	_____	_____
IT 502*	MSCE Certification Core Test #1	2	_____	_____	_____
IT 512*	MSCE Certification Core Test #2	2	_____	_____	_____
IT 522*	MSCE Certification Core Test #3	2	_____	_____	_____
IT 532*	MSCE Certification Elective Test #1	2	_____	_____	_____
IT 542*	MSCE Certification Elective Test #2	2	_____	_____	_____

Students who major in Information Technology are expected to choose one of two areas of emphasis. The areas of emphasis are Information Technology or Management Information Systems

Option One – Information Technology (39 Credit Hours)

IT 134*	A+ Certification	4	_____
IT 253*	Supporting Workstations	3	_____
IT 323*	Command Line Interface	3	_____
IT 333*	Network Administration	3	_____
IT 343*	Application Software TnT	3	_____
IT 363*	Implementing and Administrating Web Servers	3	_____
IT 373*	Web Design Fundamentals	3	_____
IT 404*	Network Protocols	4	_____
IT 423*	Supporting Network Operating Systems	3	_____
IT 453*	Network Security	3	_____
IT 474*	Network Analysis	4	_____
IT 490a	Internship in Information Technology	1	_____
IT 490b	Internship in Information Technology	1	_____

Option Two – Management Information Systems (39 Credit Hours)

MIS 143*	Introduction to Spreadsheets	3	_____
MIS 213*	Concepts of Database Management	3	_____
MIS 333*	Database Development and Design I	3	_____
MIS 343*	E-Commerce Technology	3	_____
MIS 374*	Structured Query Language and Reporting	4	_____
MIS 413*	Systems Analysis and Design	3	_____
MIS 423*	Database Development and Design II	3	_____
IT 303*	Introduction to UNIX	3	_____
IT 323*	Command Line Interface	3	_____
IT 373*	Web Design Fundamentals	3	_____
IT 383*	Current Topics in Information Technology	3	_____
IT 490a	Internship in Information Technology	1	_____
IT 490b	Internship in Information Technology	1	_____
Math 313*	Applied Statistics	3	_____

122 Credit Hours Total

INFORMATION TECHNOLOGY DEPARTMENT
Associate of Arts Degree in Information Technology

Core Requirements: (25 Credit Hours)		Cr Hr	Where Taken	Date	Grade
CoSu103	College Success	3	_____	_____	_____
Engl 103	Freshman English I	3	_____	_____	_____
Sci 113*	Technical Writing	3	_____	_____	_____
SpCm 103	Speech Communications	3	_____	_____	_____
Math 154*	College Algebra (or above)	4	_____	_____	_____
_____	Science Elective		_____	_____	_____
_____	Humanities Elective		_____	_____	_____
Psy 103	Psychology	3	_____	_____	_____
Lakota Studies Requirements: (9 Credit Hours)					
Lak 103	Lak. Language I	3	_____	_____	_____
Lsoc 103	Lakota Culture				
_____	(or LHist 203 Lakota History I)	3	_____	_____	_____
_____	Lakota Studies Elective	3	_____	_____	_____
IT Professional Requirements (24 Credit Hours)					
IT 103	3Theory of Computational Devices	3	_____	_____	_____
IT 153*	Survey of Operating Systems	3	_____	_____	_____
IT 203*	Programming	3	_____	_____	_____
IT 224*	PC Design and Assembly	4	_____	_____	_____
IT 243*	Introduction to Networks	3	_____	_____	_____
Math263*	Discrete Structures	3	_____	_____	_____
IT 273*	Business Information Systems Management	3	_____	_____	_____
IT 290a	Internship in Information Technology	1	_____	_____	_____
IT 290b	Internship in Information Technology	1	_____	_____	_____
Choose One of the Following Options					
Option One - Information Technology					
IT 134*	A+ Certification	4	_____	_____	_____
IT 253*	Supporting Workstations	3	_____	_____	_____
Option Two - Management Information Systems					
MIS 143*	Introduction to Spreadsheets	3	_____	_____	_____
MIS 213*	Concepts of Database Management	3	_____	_____	_____
		64	Credit Hours Total		

INFORMATION TECHNOLOGY DEPARTMENT
Associate of Applied Science in Office Software Applications
 (Updates and Replaces the A.A.S. Degree in Business Computers)
 (Terminal Vocational Degree)

CORE REQUIREMENTS (18 credits)	Cr Hrs	Where Taken	Date	Grade
CoSu 103* College Success	3	_____	_____	_____
Engl 103* Freshman English I	3	_____	_____	_____
Engl 113* Freshman English II	3	_____	_____	_____
SpCm 103 Speech Communication	3	_____	_____	_____
Math 103* Elementary Algebra (or higher)	3	_____	_____	_____
_____ Social Science Elective	3	_____	_____	_____
 LAKOTA STUDIES REQUIREMENTS (6 credits)				
Lak 103 Lakota Language I	3	_____	_____	_____
_____ Lakota Studies Elective	3	_____	_____	_____
 PROFESSIONAL REQUIREMENTS (30 credits)				
IT 103 Theory of Computational Devices	3	_____	_____	_____
OEd 103 Keyboarding	3	_____	_____	_____
MIS 113 Applied Information Processing	3	_____	_____	_____
OEd 123* Word Processing I	3	_____	_____	_____
SCI 113 Technical Writing	3	_____	_____	_____
MIS 143* Introduction to Spreadsheets	3	_____	_____	_____
IT 153* Survey of Operating Systems	3	_____	_____	_____
MIS 193* Fundamentals of Computer Publishing	3	_____	_____	_____
MIS 243* Data Base Applications & Design	3	_____	_____	_____
IT 273* Business Information Systems Management	3	_____	_____	_____
 PROFESSIONAL ELECTIVES (6 credits)				
Choose two courses				
(Any 100 – 200 level IT, MIS, OEd, BAd courses)				
_____	3	_____	_____	_____
_____	3	_____	_____	_____
	60	Credit Hours Total		

INFORMATION TECHNOLOGY DEPARTMENT
One-Year Certificate in Office Software Applications
 (Terminal Vocational Degree)

CORE REQUIREMENTS (18 credits)	Cr Hrs	Where Taken	Date	Grade
CoSu 103* College Success	3	_____	_____	_____
Engl 103* Freshman English I	3	_____	_____	_____
Math 103* Elementary Algebra (or higher)	3	_____	_____	_____
 LAKOTA STUDIES REQUIREMENTS (6 credits)				
Lak 103 Lakota Language I	3	_____	_____	_____
_____ Lakota Studies Elective	3	_____	_____	_____
 PROFESSIONAL REQUIREMENTS (30 credits)				
OEd 103 Keyboarding	3	_____	_____	_____
MIS 113 Applied Information Processing	3	_____	_____	_____
OEd 123* Word Processing I	3	_____	_____	_____
 PROFESSIONAL ELECTIVES (6 credits)				
Choose two courses				
(Any 100 – 200 level IT, MIS, OEd, BAd courses)				
_____	3	_____	_____	_____
_____	3	_____	_____	_____
	30	Credit Hours Total		

COURSE DESCRIPTIONS

Information Technology

SCI 113 Technical Writing

You will learn the essentials of writing clear, concise proposals, reports, technical manuals, letters, memos, bid specifications, and other technical documents. (This course DOES NOT satisfy the Engl 113 requirement for non – Science, Math and Technology programs.) 3 Credit Hours
Prerequisite: Engl 103.

IT 103 Theory of Computational Devices

You will have a close look inside today's personal computers. You will see what makes computers "tick" from transistor basics up to accessing the Internet. Detail will be given on all the essential components within a PC and how they interact. This class also addresses the latest aspects of computer technology (e.g., DVD) and how they affect computer use and operation. Presentations of actual hardware (VLSI integrated circuits, modems, etc.) are included so that you can visually appreciate the complexity of the circuitry involved. Copyright issues and ethics involved with computer operations will be discussed.
3 Credit Hours

IT 134 A+ Certification

This course will prepare you to pass the A+ certification exams as required to become a computer service technician. You are prepared for the A+ exam in areas like assembly and disassembly of PCs, diagnosing and troubleshooting, basic networking, Windows and DOS. (3,2) 4 Credit Hours
Prerequisite: IT 103, permission of instructor.

IT 153 Survey of Operating Systems

You will explore the differences between popular operating systems offered in today's marketplace. Operating Systems include, but not limited to Windows and UNIX. (2,2) 3 Credit Hours
Prerequisite: IT 103, permission of instructor.

IT 203 Programming

You will be exposed to the fundamental concepts of problem solving and developing program logic using tools and techniques of programming. Topics include algorithm development, diagramming and program documentation and incorporating a programming language for hands-on application of programming concepts. C++ will be from UNIX. (2,2) 3 Credit Hours
Prerequisite: IT 103, Math 154, permission of instructor.

IT 224 PC Design and Assembly

Participants will be able to identify essential components of a typical PC system and how they interact with each other. By the end of the semester, participants will be able to construct a working PC system complete with operating system. (2,4) 4 Credit Hours
Prerequisite: IT 134, permission of instructor.

IT 243 Introduction to Networks

Physical and logical network topologies; transmission media and network access will be examined. Hardware and software network configurations, operations and requirements will be discussed. Topics include communication codes, transmission media, encoding methods, the OSI model, network standards and protocols. Copyright issues and ethics involved with computer operations will be discussed. 3 Credit Hours
Prerequisites: IT 103, permission of instructor.

IT 253 Supporting Workstations

Focuses on the skills necessary to install and manage a GUI workstation environment. The basic areas you will cover include installation and configuration, architectural overview, user interface, memory management, file I/O, network administration, communications and printing, disk utilities, troubleshooting, and multimedia. Linux and Windows XX systems will be used. (2,2) 3 Credit Hours

Prerequisite: IT 134, permission of instructor.

IT 273 Business Information Systems Management

A study of the Systems Development Life Cycle including problem investigation, determination of systems requirements, selection of solutions, feasibility studies, cost projections and proposal writing for existing or new systems. 3 Credit Hours

Prerequisite: SCI 113 or Engl 103 permission of instructor.

IT 290a, IT 290b, Internship in Information Technology

This course will be offered each semester. It is designed to introduce you to the rigors of being an Information Technology professional. You are expected to work 40 hours during the semester for each hour of credit. 1 Credit Hour -- up to 2 credits can be earned per semester.

Prerequisite: permission of instructor.

IT 303 Introduction to UNIX

You will be given an introduction to UNIX operating system with specific reference to UNIX commands, the Unix file structure, editors, and shell programming. Includes an introduction to system administration and security. (2,2) 3 Credit Hours

Prerequisite: IT 103, permission of instructor.

IT 313 Unix Shell Programming

UNIX is a versatile multi-user, multitasking operating system. UNIX has a structural software tool design philosophy that is essential for producing reliable, maintainable, and portable programs. You will cover the essential aspects of UNIX Shell programming such as the Bourne shell and shell scripts. In this class you will learn to manage UNIX files and directories using the UNIX shell commands, work with shell variables, metacharacters and regular expressions, use shell commands to redirect input, output and error messages, and archive files in the background and write different types of shell scripts. (2,2) 3 Credit Hours

Prerequisite: IT 103, permission of instructor.

IT 323 Command Line Interface

Command line concepts and syntax to perform directory hierarchy maintenance, I/O redirection, pipes, and device and system maintenance using variables and switches are topics of the command line interface course. The Disk Operating System (DOS) and UNIX dialects will be studied. 3 Credit Hours

IT 333 Network Administration

This course will acquaint you to a network environment and to provide basic entry-level skills in network administration. Hands-on exercises will allow you to become familiar with popular network operating system's management utilities including printing services, storage devices and setup of networking protocols. (2,2) 3 Credit Hours

Prerequisite: IT 243 & IT 253, permission of instructor.

IT 343 Application Software TnT

This course will help you to develop problem-solving tactics to help end users overcome difficulties with their application program. Training aspects and how you can take a proactive approach for training end users on application programs will be investigated. 3 Credit Hours

Prerequisite: SCI 113, IT 253, permission of instructor.

IT 353 Internet Technologies

This course is aimed at giving you a comprehensive overview of Internet technologies. You will learn about the history of the Internet, how to use a wide array of Internet technologies, Internet trends and current issues relating to the Internet. Students will also learn the key skills required to create attractive, well-designed, secure WEB sites that meet the goals of a business organization. (2,2) 3 Credit Hours
Prerequisite: IT 253, permission of instructor.

IT 363 Implementing and Administrating Web Servers

In this course you will learn the fundamentals of designing, installing, configuring, maintaining and upgrading your web site. Protocols presented include HTTP, HTTPS, FTP and SSH. Concepts covered include the use of indexed pages, directory hierarchy, SSL Certificates, SSI designs (ASP, CGI, JSP, PHP) and Streaming Media. Management of server logs, users and groups as they pertain to Web Servers will also be covered. (2,2) 3 Credit Hours
Prerequisite: IT 243, permission of instructor

IT 373 Web Design Fundamentals

This course will explore aspects of the design and creation of web sites including the initial planning, design, implementation and publishing. With an emphasis on design, we will use web design tools such as HTML, Dreamweaver, Fireworks, and Photoshop Elements for the web will be covered. Copyright issues will also be covered. Students will design and publish a personal web page as part of the course. There will be a course web site with relevant URLs for that day's topic. 3 Credit Hours
Prerequisite: IT 103, Permission of the instructor

IT 383 Current Topics in Information Technology

Offers current topics from the area of Information Technology systems. 3 Credit Hours
Prerequisite: permission of instructor

IT 393 Implementing and Administrating Mail Servers

In this course you will learn the fundamentals of designing, installing, configuring, maintaining and upgrading your email site. Protocols that will be covered include SMTP, ESMTP, IMAP and POP3. Concepts covered include the communications dialogs between MUA, MSA, MTA, MRA and MDA, the design of the MX priority, antivirus and spam prevention techniques, email relays and mail encryption. Management of server logs, users and groups as they pertain to Email Servers will also be covered. (2,2) 3 Credit Hours
Prerequisite IT 243, permission of instructor

IT 404 Network Protocols

Focuses on TCP/IP using Microsoft Windows NT and UNIX. Topics include UNIX and Microsoft TCP/IP addressing, subnet addressing, implementing IP routing, dynamic host configuration protocol, IP, IPX/SPX, ATM address resolution, Net BIOS name resolution, Windows Internet name service, host name resolution, connectivity, and troubleshooting. (3,2) 4 Credit Hours
Prerequisite: IT 243, permission of instructor

IT 414 Advanced NT

You will learn the installation and configuration of Windows NT Server and Workstation with an emphasis on the management and administration of user hardware and software resources. Hands on application of network administration principles on an operational NT Network is provided. (2,4) 4 Credit Hours
Prerequisite: IT 153, IT 253, permission of instructor

IT 423 Supporting Network Operating Systems

Advanced network commands and utilities will be demonstrated to you to further supplement the skills required by a network administrator. Directory structures, security, printing and network administration will

be covered. Troubleshooting methods and procedures will be discussed for workstations, servers and related hardware, and printing systems. Hardware and software to aid with problem identification and resolution will be discussed and demonstrated where possible. Network optimization and disaster recovery will be covered as well as copyright issues and ethics involved with computer operations. (2,2) 3 Credit Hours

Prerequisite: IT 153, IT 253 & IT 333, permission of instructor.

IT 433 Supporting Windows NT Workstation

Provides you with a foundation on the Windows NT workstation and fundamentals. Topics include the Windows NT environment, workstation, printing, remote access, troubleshooting, configuration, installation, managing accounts and user rights, securing directory and file resources, securing the system, networking environment and communication, networking browsing and booting Windows NT, and supporting applications. (2,2) 3 Credit Hours

Prerequisite: permission of instructor.

IT 443 Advanced Unix

This course is for users interested in becoming UNIX administrators. In this course we will identify the hardware requirements for a UNIX system, the features of job control, the guidelines for managing disk space usage, the benefits of networking, the features of Transmission Control Protocol/Internet Protocol (TCP/IP), the requirements for remote access, the features of Network Information Services (NIS) and the features of Lightweight Directory Access Protocol (LDAP). (2,2) 3 Credit Hours

Prerequisite: permission of instructor.

IT 453 Network Security

Provides you with the essential concepts and methods for the network security. Topics covered include physical/logical security and different methods of implementation, data encryption/decryption. There will be discussions of commercial and open source products for firewall, proxy, cache and NAT. (2,2) 3 Credit Hours

Prerequisite: permission of instructor.

IT 474 Network Analysis

Provides you with the theory and methodologies for designing and analyzing network systems. Topics that you will cover include techniques used by computer professionals to determine, document, and analyze the network requirements; assessing the hardware/software needs of an organization. Emphasis will be on problem solving and cost-analysis in a networking environment. (2,3) 4 Credit Hours

Prerequisite: permission of instructor.

IT 490a, IT 490b, Internship in Information Technology

This course will be offered each semester. It is designed to introduce you to the rigors of being an Information Technology professional. You are expected to work 40 hours during the semester for each hour of credit. 1 Credit Hour -- up to 2 credits can be earned per semester.

Prerequisite: permission of instructor.

IT 502 Microsoft Certified Systems Engineer Certification Core Test #1

This class will help you study for the Microsoft Certified Systems Engineer Core Test #1.

(1,2) 2 Credit Hours

Prerequisite: Senior status, permission of instructor.

IT 512 Microsoft Certified Systems Engineer Certification Core Test #2

This class will help you study for the Microsoft Certified Systems Engineer Certification Core Test #2.

(1,2) 2 Credit Hours

Prerequisite: Senior status, permission of instructor.

IT 522 Microsoft Certified Systems Engineer Certification Core Test #3

This class will help you study for the Microsoft Certified Systems Engineer Certification Core Test #3.
(1,2) 2 Credit Hours

Prerequisite: Senior status, permission of instructor.

IT 532 Microsoft Certified Systems Engineer Certification Elective Test #1

This class will help you study for the Microsoft Certified Systems Engineer Certification Core Test #1.
(1,2) 2 Credit Hours

Prerequisite: Senior status, permission of instructor.

IT 542 Microsoft Certified Systems Engineer Certification Elective Test #2

This class will help you study for the Microsoft Certified Systems Engineer Certification Core Test #2.
(1,2) 2 Credit Hours

Prerequisite: Senior status, permission of instructor.

Management Information Systems

MIS 113 Applied Information Processing

An applied course designed to meet the needs of today's college students across the disciplines. Topics include, but are not limited to: computers based training techniques and on-line testing, E-mails and attachments, on-line conferences, delimited web-based research techniques, software applications, e-slides and web page presentation/publishing tools, and report writing documentation.

3 Credit Hours

MIS 143 Introduction to Spreadsheets

This is a continuation of the study of spreadsheets emphasizing the advanced features of functions, macros and business graphics. 3 Credit Hours

Prerequisite: MIS 113.

MIS 213 Concepts of Database Management

An introduction to Data Base Management Systems (DBMS). Topics include but not limited to: relational models, keys, functions, queries, reports and management of database systems. 3 Credit Hours

Prerequisite: MIS 113.

MIS 243 Data Based Applications and Design

A continuation of the study of database emphasizing data base concepts, design and management techniques.

3 Credit Hours

Prerequisite: MIS 113.

MIS 333 Database Development and Design I

The first of two courses uses and applied approach to learning MySQL, a database management (DBMS). Topics include but not limited to: table creation, constraints, data manipulation and users.

3 Credit Hours

Prerequisite: MIS 243.

MIS 343 E-Commerce Technology

This course provides the student an introduction to e-commerce technologies. Topics include but not limited to: the on-line presence, data security, payment systems and legal/ethical issues.

3 Credit Hours

Prerequisite: MIS 333

MIS 413 Systems Analysis and Design

This course will provide the student acceptable approaches to system analysis, design and implementation. Students will begin with systems analysis, determining system requirements, evaluating systems and designing and implement a system.

3 Credit Hours

Prerequisite: IT 273

MIS 423 Database Development and Design II

The second of two courses uses an applied approach to learning MySQL, a database management system (DBMS). Topics include but not limited to: sorts, joins, group functions, output and SQL.

3 Credit Hours

Prerequisite: MIS 333

MIS 374 Structured Query Language and Reporting

SQL and Reporting is a course designed to provide SQL mastery.

4 Credit Hours

Prerequisite: MIS 243.

E-Certificate in Distance Learning

ET 403 Fundamentals of Distance Education

This course will provide the student with a foundation of knowledge, skills and attitudes that are required by a competent practitioner of distance education. Students will explore the critical concepts and issues identified in distance education literature and critically examine the history and theories of the field.

3 Credit Hours

ET 413 Information Technologies in Distance Education

This course explores the role that technology plays in the design, development and delivery of distance education courses. Various uses of technology are explored in the areas of course development; asynchronous and synchronous distance course delivery methods, and management/administration. The relationship of information technology and distance education is explored as special emphasis is placed on computer-based technologies. Students will gain an understanding of how technologies can be blended together to form a learner friendly distance education course. By the end of this course, the student will be familiar with the basic technology as it pertains to distance education with Microsoft Word, Excel and Power point, and Macromedia Flash and Dreamweaver.

3 Credit Hours

ET 423 Course Development and Instructional Design in Distance Education

This course examines the process of instructional design and development in a distance education context. Students critically evaluate the relationship between instructional design and technology. Various models of instructional and course development are considered. Students apply the instructional development process by developing a small instructional unit. Special emphasis is given to web-based instructional design and delivery. Course topics include learning beliefs, design tools, analysis, designing instruction, and evaluation.

3 Credit Hours

ET 433 Web-Based Learning and Teaching in the Virtual Classroom

The Virtual Classroom is a new concept that has recently evolved because of the emergence of the World Wide Web as a means of delivering education. This course covers the brief history, definitions, and implementations of the concept of the Virtual Classroom. The rapidly evolving literature of web-based learning is explored, with special emphasis placed on web-based pedagogy/andragogy, student learning styles, and special considerations for course design. The impact of web-based technologies will be discussed. Students will begin developing web-based learning environments and will use web-based communication tools.

3 Credit Hours