ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: CSN 1230; Network Administration I

Date: Spring 2014

Credit Hours: 3

Prerequisite(s):   CSN 1225 (Core Network Technologies) or concurrent enrollment

Delivery Method: ☒ **Lecture**   **2 Contact Hours** (1 contact = 1 credit hour)

☐ **Seminar**   **0 Contact Hours** (1 contact = 1 credit hour)

☒ **Lab**   **2 Contact Hours** (2 contact = 1 credit hour)

☐ **Clinical**   **0 Contact Hours** (3 contact = 1 credit hour)

☐ **Online**

☐ **Blended**

Offered: ☒ **Fall**   ☒ **Spring**   ☐ **Summer**

IAI Equivalent –*Only for Transfer Courses*-go to *http://www.itransfer.org*:

CATALOG DESCRIPTION:
An introductory course to the Microsoft Server network operating system. Basic system administration and troubleshooting are covered. Creation of user accounts, groups, storage management are examined and applied through lecture, demonstration and hands-on activities.

GENERAL EDUCATION GOALS ADDRESSED
[See the last page of this form for more information.]

Upon completion of the course, the student will be able:
[Choose those goals that apply to this course.]

☒ To apply analytical and problem solving skills to personal, social and professional issues and situations.

☐ To communicate orally and in writing, socially and interpersonally.

☐ To develop an awareness of the contributions made to civilization by the diverse cultures of the world.

☐ To understand and use contemporary technology effectively and to understand its impact on the individual and society.

☒ To work and study effectively both individually and in collaboration with others.

☐ To understand what it means to act ethically and responsibly as an individual in one's career and as a member of society.

☐ To develop and maintain a healthy lifestyle physically, mentally, and spiritually.

☐ To appreciate the ongoing values of learning, self-improvement, and career planning.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:
[Outcomes related to course specific goals.]

Upon completion of the course, the student will be able to:
1. Explain the different Windows Server solutions and Active Directory's role in a Windows Server environment.
2. Install and configure a Windows Server.
3. Use Active Directory to manage user accounts.
4. Use Active Directory to manage group accounts.
5. Manage network folders and files.
6. Configure network printing.
7. Configure basic server security.

Outcome 1 – Upon completion of the course, the student will be able to explain the different Windows Server solutions and Active Directory's role in a Windows Server environment.

Competency 1.1 – the student will discover different editions of Windows Server.

Competency 1.2 – the student will know when to use the different editions of Windows Server

Competency 1.3 – The student will know the minimum requirements to install the different editions of Windows Server

Competency 1.4 – the student will learn the schema of Active Directory and the types of objects that it can hold

Competency 1.5 – the student will learn the concepts of domains and forests.

Outcome 2 – Upon completion of the course, the student will be able to install and configure a Windows Server.

Competency 2.1 – the student will gather information about their hardware and network to prepare for the installation of Windows Server.

Competency 2.2 – the student will prepare the hard disk.

Competency 2.3 – the student will install Windows Server.

Competency 2.4 – the student will troubleshoot the Windows Server installation.

Outcome 3 – Upon completion of the course, the student will be able to use Active Directory to manage user accounts.

Competency 3.1 – the student will understand the Active Directory concepts and terminology.

Competency 3.2 – the student will create users using Active Directory.

Competency 3.3 – the students will modify users using Active Directory.

Competency 3.4 – the students will group user accounts into OUs and domains

Competency 3.5 – the students will understand the attributes of user account objects and be able to compare them with other Active Directory objects.

Outcome 4 – Upon completion of the course, the student will be able to use Active Directory to manage group accounts.

Competency 4.1 - the student will create groups using Active Directory.

Competency 4.2– the students will modify groups using Active Directory.

Competency 4.3– the students will understand the attributes of group account objects and be able to compare them with other Active Directory objects.

Outcome 5 – Upon completion of the course, the student will be able to manage network folders and files.

Competency 5.1- the student will be able to configure folder and file attributes.

Competency 5.2 – the student will be able to configure folder and file permissions.

Competency 5.3 – the student will be able to configure shared and private folders.

Competency 5.4 – the student will be able to configure disk quotas.

Outcome 6 – Upon completion of the course, the student will be able to configure network printing.

Competency 6.1 – the student will be able to explain how network printing works

Competency 6.2 – the student will be able to explain how Internet printing works

Competency 6.3 – the student will be able to configure a network or Internet printer

Competency 6.4 – the student will learn to manage print jobs on a network

Outcome 7 – Upon completion of the course, the student will be able to configure server security.

Competency 7.1 – the student will be able to establish account policies.

Competency 7.2 – the student will be able to establish group policies.

COURSE TOPICS AND CONTENT REQUIREMENTS:

Introduction to Windows Server 2008
Installing Windows Server 2008
Configuring the Windows Server 2008 Environment
Introduction to Active Directory and Account Management
Configuring Windows Server 2008 Printing
Configuring and Managing Data Storage
Securing Windows Server 2008

INSTRUCTIONAL METHODS:

Classroom lecture and demonstration
Student hands-on lab exercises

INSTRUCTIONAL MATERIALS:

MCTS Guide to Microsoft Windows Server 2008 Active Directory Configuration by Greg Tomsho

TestOut Software for WindowsServer Certification
Earphones/Headphones

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:
Students will successfully complete all assigned hands-on activities performed during class/lab.
Students will successfully complete and turn in all independent hands-on application assignments.
Students will successfully complete quizzes on the topic discussed.
Students will successfully complete a midterm and final written exam covering terminology.
Students will successfully complete a midterm and final hands-on exam covering tasks assigned.

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D

OTHER REFERENCES
MCTS Guide to Microsoft Windows Server 2008 Network Infrastructure Configuration, 1st Edition

Course Competency/Assessment Methods Matrix

| CSN 1230; Network Administration I | Assessment Options | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

For each competency/outcome place an "X" below the method of assessment to be used.

Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.	Direct/ Indirect	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment
		D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D						
Outcome 1 – Upon completion of the course, the student will be able to explain the different Windows Server solutions and Active Directory's role in a Windows Server environment.		X						X	X																			X				X
Outcome 2 – Upon completion of the course, the student will be able to install and configure a Windows Server.					X										X													X	X			X
Outcome 3 – Upon completion of the course, the student will be able to use Active Directory to manage user accounts.					X										X													X				X
Outcome 4 – Upon completion of the course, the student will be able to use Active Directory to manage group accounts.					X										X													X				X
Outcome 5 – Upon completion of the course, the student will be able to manage network folders and files.					X										X													X				X

CSN 1230; Network Administration I	Assessment Options																														
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.	**Direct/ Indirect**	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D						
Outcome 6 – Upon completion of the course, the student will be able to configure network printing.					X										X													X				X
Outcome 7 – Upon completion of the course, the student will be able to configure server security.					X										X													X				X