

Washtenaw Community College Comprehensive Report

CNT 201 Microsoft Client/Server Administration

Effective Term: Fall 2024

Course Cover

College: Business and Computer Technologies

Division: Business and Computer Technologies

Department: Computer Science & Information Technology

Discipline: Computer Networking Technology

Course Number: 201

Org Number: 13400

Full Course Title: Microsoft Client/Server Administration

Transcript Title: Microsoft Client/Server Admin

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Course Change

Change Information:

Course title

Course description

Pre-requisite, co-requisite, or enrollment restrictions

Outcomes/Assessment

Objectives/Evaluation

Rationale: Prepare for canvas update

Proposed Start Semester: Spring/Summer 2024

Course Description: In this course, students learn to install, configure, and administer the Microsoft Windows Client operating system in a standalone, workgroup, and domain environment. Topics covered include configuring file systems, security, and network settings. Students will learn troubleshooting techniques and industry standards for deployment. A basic understanding of Windows operating systems and networking principles is required. The title of this course was previously Administering Microsoft Windows Client Operating Systems.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 45 Student: 45

Lab: Instructor: 0 Student: 0

Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 45 Student: 45

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 2

Requisites

Level II Prerequisite

CST 160 minimum grade "C"

Highly recommended course for students who have no prior experience with Computer Security.

General Education

General Education Area 7 - Computer and Information Literacy

Assoc in Arts - Comp Lit

Assoc in Applied Sci - Comp Lit

Assoc in Science - Comp Lit

Request Course Transfer

Proposed For:

Eastern Michigan University

Student Learning Outcomes

1. Plan and prepare the installation of the Windows client operating system in a corporate and Small Offices/Home Offices (SOHO) environment.

Assessment 1

Assessment Tool: Outcome-related multiple-choice test questions

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 70% of the students will correctly answer 80% of these questions.

Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Outcome-related lab activities

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Task check list

Standard of success to be used for this assessment: At least 70% of the students will successfully install Windows client on a computer without instructor assistance by the third attempt.

Who will score and analyze the data: Departmental faculty

2. Configure Windows client operating system in a workgroup environment, including the configuration of users/groups, network protocols, file shares, encryption.

Assessment 1

Assessment Tool: Outcome-related multiple-choice test questions

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 70% of the students will correctly answer 80% of these questions.

Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Outcome-related lab activities

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Task check list

Standard of success to be used for this assessment: At least 70% of the students will successfully configure Windows client to meet the specified requirements without instructor assistance by the third attempt.

Who will score and analyze the data: Departmental faculty

3. Troubleshoot various configuration problems in a Windows Workgroup peer-to-peer network.

Assessment 1

Assessment Tool: Outcome-related multiple-choice test questions

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 70% of the students will correctly answer 80% of these questions.

Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Outcome-related lab activities

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Task check list

Standard of success to be used for this assessment: At least 70% of the students will successfully troubleshoot and repair instructor inserted problems in a Windows client environment without instructor assistance by the third attempt.

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Create installation media in Windows.
2. Install Windows Client Operating System.
3. Configure the Windows environment.
4. Configure the Windows IPv4 network.
5. Create user accounts in Windows.
6. Configure file and folder access in Windows.
7. Configure Windows security settings.
8. Identify and configure multiple disk structures and RAID Configurations.
9. Configure storage spaces in Windows.
10. Configure local user permissions and rights in Windows.
11. Manage system monitoring and maintenance utilities in Windows.
12. Install Microsoft server operating system.
13. Install and configure the IIS web service.
14. Install and configure Active Directory in Windows.
15. Configure Windows server file and folder permissions.
16. Configure group policies in Windows.
17. Create a configured Windows client.
18. Create a configured Windows Active Directory server.
19. Join a client computer to the Active Directory domain.

New Resources for Course

1 TB External Hard Drive

Course Textbooks/Resources

Textbooks

Manuals

Kidd, Michael. Microsoft Client/Server Administration CNT201 Labs, Washtenaw Community College, 01-01-2024

Periodicals

Software

Equipment/Facilities

Level III classroom

Computer workstations/lab

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Michael Kidd</i>	<i>Faculty Preparer</i>	<i>Jan 18, 2024</i>
Department Chair/Area Director: <i>Scott Shaper</i>	<i>Recommend Approval</i>	<i>Jan 22, 2024</i>
Dean: <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Jan 23, 2024</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Apr 25, 2024</i>
Assessment Committee Chair: <i>Jessica Hale</i>	<i>Recommend Approval</i>	<i>May 01, 2024</i>
Vice President for Instruction: <i>Brandon Tucker</i>	<i>Approve</i>	<i>May 01, 2024</i>

Washtenaw Community College Comprehensive Report

CNT 201 Administering Microsoft Windows Client Operating Systems Effective Term: Fall 2020

Course Cover

Division: Business and Computer Technologies

Department: Computer Science & Information Technology

Discipline: Computer Networking Technology

Course Number: 201

Org Number: 13400

Full Course Title: Administering Microsoft Windows Client Operating Systems

Transcript Title: Administering MS Win Clients

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Course Change

Change Information:

Consultation with all departments affected by this course is required.

Course description

Pre-requisite, co-requisite, or enrollment restrictions

Outcomes/Assessment

Objectives/Evaluation

Rationale: This course needs to be updated to the new Microsoft Windows 10 certification requirements.

Proposed Start Semester: Fall 2020

Course Description: In this course, students are provided with a strong foundation in installing, configuring and administering Windows client operating systems. Topics covered include configuring file systems, security, networking protocols and network printing. Performance tuning and troubleshooting will be taught, with an emphasis on the boot process and application support. A basic understanding of Windows operating systems and networking principles is required.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 45 Student: 45

Lab: Instructor: 0 Student: 0

Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 45 Student: 45

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 2

Requisites

General Education

General Education Area 7 - Computer and Information Literacy

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Request Course Transfer

Proposed For:

Eastern Michigan University

Student Learning Outcomes

1. Plan and prepare the installation of the Windows client operating system in a corporate and Small Offices/Home Offices (SOHO) environment.

Assessment 1

Assessment Tool: Outcome-related multiple-choice test questions

Assessment Date: Winter 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 70% of the students will correctly answer 80% of these questions.

Who will score and analyze the data: Departmental faculty

Assessment 2

Assessment Tool: Lab activities

Assessment Date: Winter 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Task check list

Standard of success to be used for this assessment: At least 70% of the students will successfully install Windows client on a computer without instructor assistance by the third attempt.

Who will score and analyze the data: Departmental faculty

2. Configure Windows client operating system in a workgroup environment, including the configuration of users/groups, network protocols, file shares, encryption and printing.

Assessment 1

Assessment Tool: Outcome-related multiple-choice test questions

Assessment Date: Winter 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Answer key

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Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Task check list

Standard of success to be used for this assessment: At least 70% of the students will successfully troubleshoot and repair instructor inserted problems in a Windows client environment without instructor assistance by the third attempt.

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Determine hardware requirements and compatibility.
2. Choose an upgrade or a clean installation.
3. Perform a clean installation.
4. Configure native boot scenarios.
5. Install Windows to a Virtual Hard Disk (VHD).
6. Install Windows on a bootable USB.
7. Install a new piece of hardware and configure the settings for the device.
8. Configure and customize the user interface.
9. Configure Hyper-V.
10. Implement Windows in an enterprise environment.
11. Configure and support Internet Protocol version 4 (IPv4) and IPv6 network settings.
12. Configure Windows Firewall, including advanced security and network discovery.
13. Configure disks, volumes, and file systems.
14. Create and configure virtual hard disks.
15. Create and configure storage spaces.
16. Configure file and printer sharing.
17. Configure folder shares.
18. Configure desktop applications.
19. Configure Windows features.
20. Configure remote management.
21. Configure Windows Update options.
22. Monitor Windows performance.
23. Configure system and data recovery.
24. Configure authorization and authentication.

25. Configure advanced management tools.

New Resources for Course

Course Textbooks/Resources

Textbooks

Bettany, Andrew & Warren, Andrew. *Installing and Configuring Windows 10 Exam Ref 70-698*, ed. Microsoft Press, 2016, ISBN: 978-1-509-305.

Manuals

Trame, John. Administering Microsoft Windows Clients CNT201 Labs, Washtenaw Community College, 09-01-2017

Periodicals

Software

Equipment/Facilities

Level III classroom

Computer workstations/lab

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>John Trame</i>	<i>Faculty Preparer</i>	<i>Feb 27, 2020</i>
Department Chair/Area Director: <i>Cyndi Millns</i>	<i>Recommend Approval</i>	<i>May 07, 2020</i>
Dean: <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>May 08, 2020</i>
Curriculum Committee Chair: <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Jul 14, 2020</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Jul 15, 2020</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Jul 16, 2020</i>