Washtenaw Community College Comprehensive Report

CIS 208 Linux/UNIX III: Intermediate System Administration, Networking, and Security
Effective Term: Fall 2014

Course Cover

Division: Business and Computer Technologies
Department: Computer Instruction
Discipline: Computer Information Systems
Course Number: 208
Org Number: 13410
Full Course Title: Linux/UNIX III: Intermediate System Administration, Networking, and Security
Transcript Title: Linux/UNIX III: Intermediate
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Three Year Review / Assessment Report
Change Information:
Consultation with all departments affected by this course is required.
Credit hours
Total Contact Hours
Distribution of contact hours
Outcomes/Assessment
Objectives/Evaluation
Other:
Rationale: Increase credit and contact hours due to additional content. Course was conditionally approved - seeking full approval.
Proposed Start Semester: Fall 2014
Course Description: In this third of four courses on the Linux operating system, Linux networking theory is discussed and practical application of the theory is shown through lab exercises. Students should be familiar with common Linux distributions and comfortable with system administration activities to succeed in this course. This course is designed to prepare students for Linux Certification Exams.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 60 **Student:** 60
Lab: Instructor: 0 **Student:** 0
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60
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

Requisites

Prerequisite
Academic Reading and Writing Levels of 6
Prerequisite
Level II Prerequisite: CIS 206 minimum grade "C"

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:

Student Learning Outcomes

1. Identify and apply intermediate system administration skills.
   Assessment 1
   Assessment Tool: Short answer test
   Assessment Date: Winter 2016
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All sections
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher
   Who will score and analyze the data: Departmental faculty
   Assessment 2
   Assessment Tool: Lab exercises
   Assessment Date: Winter 2016
   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: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher
   Who will score and analyze the data: Departmental faculty

2. Set up network configurations using UNIX utilities.
   Assessment 1
   Assessment Tool: Short answer test
   Assessment Date: Winter 2016
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All sections
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher
   Who will score and analyze the data: Departmental faculty
   Assessment 2
   Assessment Tool: Lab exercises
   Assessment Date: Winter 2016
   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: Departmentally-developed rubric
Standard of success to be used for this assessment: 70% of the students will score 70% or higher
Who will score and analyze the data: Departmental faculty

3. Use the Debian package management tools.
   Assessment 1
   Assessment Tool: Short answer test
   Assessment Date: Winter 2016
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All sections
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher
   Who will score and analyze the data: Departmental faculty
   Assessment 2
   Assessment Tool: Lab exercises
   Assessment Date: Winter 2016
   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: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher.
   Who will score and analyze the data: Departmental faculty

4. Control mounting and unmounting of a file system and manage disk quotas.
   Assessment 1
   Assessment Tool: Short answer test
   Assessment Date: Winter 2016
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All sections
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher.
   Who will score and analyze the data: Departmental faculty
   Assessment 2
   Assessment Tool: Lab exercises
   Assessment Date: Winter 2016
   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: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students will score 70% or higher.
   Who will score and analyze the data: Departmental faculty

Course Objectives

1. Customize shell environments.
   Matched Outcomes
2. Query and manipulate data using basic SQL commands.
   Matched Outcomes
3. Set up and customize a display manager.
   Matched Outcomes
4. Maintain system time and synchronize the clock using Network Time Protocol (NTP).
   Matched Outcomes

5. View, change and verify configuration settings on client hosts.
   Matched Outcomes
6. Manually and automatically configure network interfaces and routing tables.
   Matched Outcomes
7. Configure client-side DNS.
   Matched Outcomes
8. Perform package management using the Debian package tools to install, upgrade and uninstall packages.
   Matched Outcomes
9. Using Debian tools, find packages containing specific files or libraries which may or may not be installed.
   Matched Outcomes
10. Configure the mounting of a file system.
    Matched Outcomes
11. Set up disk quotas for a file system, monitor and generate quota reports.
    Matched Outcomes
12. Maintain standard file system as well as extra data associated with a journaling file system.
    Matched Outcomes

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Philip Geyer	*Faculty Preparer*	*Dec 13, 2013*
Department Chair/Area Director:		
John Trame	*Recommend Approval*	*Dec 19, 2013*
Dean:		
Rosemary Wilson	*Recommend Approval*	*Dec 19, 2013*
Vice President for Instruction:		
Bill Abernethy	*Approve*	*Jan 29, 2014*