Washtenaw Community College Comprehensive Report

CIS 121 Linux/UNIX I: Fundamentals
Effective Term: Winter 2018

Course Cover

Division: Business and Computer Technologies
Department: Computer Instruction
Discipline: Computer Information Systems
Course Number: 121
Org Number: 13410
Full Course Title: Linux/UNIX I: Fundamentals
Transcript Title: Linux/UNIX I: Fundamentals
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.
 Course description
 Pre-requisite, co-requisite, or enrollment restrictions
 Outcomes/Assessment
 Objectives/Evaluation
Rationale: Changes to Linux Program and Course Review
Proposed Start Semester: Winter 2018
Course Description: In this course, students are introduced to UNIX and Linux tools. The course covers the UNIX/Linux file system, communication with other users, editors, file manipulation and processing, basics of pipes and redirection, simple shell programming, and a basic introduction to Linux. This course is designed to help students prepare for the LPI Linux Essentials Certificate.

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

Level II Prerequisite

Completion of a CIS (above CIS 100), CPS, or CSS course.

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. Install a working Linux/UNIX system.
   Assessment 1
   Assessment Tool: Lab exercise(s)
   Assessment Date: Fall 2019
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students who complete the course
   How the assessment will be scored: Departmentally-developed rubric
   Standard of success to be used for this assessment: 70% of the students should score 70% or higher on the lab exercise(s)
   Who will score and analyze the data: Lead instructor

2. Use the Linux/UNIX command line interface (CLI) to accomplish standard tasks.
   Assessment 1
   Assessment Tool: Selected questions from the final exam
   Assessment Date: Winter 2019
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students who complete the course
   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 on the exam
   Who will score and analyze the data: Lead Instructor

3. Create and modify files with the VI editor.
   Assessment 1
   Assessment Tool: Lab assignments
   Assessment Date: Fall 2019
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: All students who complete the course
   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: Lead instructor

4. Create user accounts and modify file and directory permissions.
   Assessment 1
   Assessment Tool: Lab exercises

Assessment Date: Fall 2019
Assessment Cycle: Every Three Years
Course section(s)/other population: All sections
Number students to be assessed: All students who complete the course
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: Lead Instructor

5. Use the Linux/UNIX GUI to accomplish standard tasks.

> **Assessment 1**
>
> Assessment Tool: Lab Assignments
> Assessment Date: Fall 2919
> Assessment Cycle: Every Three Years
> Course section(s)/other population: All sections
> Number students to be assessed: All students who complete the course
> 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: Lead instructor

Course Objectives

1. Log into the newly installed system.
2. Connect to a remote server from the new system.
3. Print selected configuration files of the new system.
4. Create new files with specified content using the VI editor.
5. Add and change information in files using the VI editor.
6. Delete selected information from files using the VI editor.
7. Create one or more user accounts as instructed.
8. Modify ownership of files and directories as instructed.
9. Change file and directory permissions as instructed.
10. Explain effects of ownership and permission settings.
11. From the Linux/UNIX GUI interface, start programs four different ways.
12. Using the Linux/UNIX GUI interface, copy and move files.
13. Modify the settings of the Linux/UNIX GUI interface.
14. Using the CLI, demonstrate the use of absolute path, relative path and tilde path.
15. Using the CLI, move files, copy files and create link to files.
16. Using the CLI, locate files and directories with specific characteristics.
17. Using the CLI, search the content of files and the output of commands for specific phrases or patterns.

New Resources for Course

Course Textbooks/Resources

Textbooks
> Roderick Smith. *Linux Essentials*, 1st ed. Wiley, 2012, ISBN: 978-1-118-106.
> E Ray and D Ray. *Visual Quickstart Guide to Unix and Linux*, 5th ed. Peachpit Press, 2014, ISBN: 978-032199754.

Manuals
Periodicals
Software

Equipment/Facilities

Computer workstations/lab

Reviewer	Action	Date
Faculty Preparer:		
Philip Geyer	*Faculty Preparer*	*Aug 17, 2017*
Department Chair/Area Director:		
Philip Geyer	*Recommend Approval*	*Aug 17, 2017*
Dean:		
Eva Samulski	*Recommend Approval*	*Aug 22, 2017*
Curriculum Committee Chair:		
Lisa Veasey	*Recommend Approval*	*Oct 17, 2017*
Assessment Committee Chair:		
Michelle Garey	*Recommend Approval*	*Oct 18, 2017*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Oct 25, 2017*