

# Washtenaw Community College Comprehensive Report

## CIS 206 Linux/UNIX II: Basic System Administration, Networking, and Security Effective Term: Spring/Summer 2014

### Course Cover

**Division:** Business and Computer Technologies

**Department:** Computer Instruction

**Discipline:** Computer Information Systems

**Course Number:** 206

**Org Number:** 13410

**Full Course Title:** Linux/UNIX II: Basic System Administration, Networking, and Security

**Transcript Title:** Linux/UNIX II: Basic System Ad

**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 because of added content. Course was conditionally approved - seeking full approval.

**Proposed Start Semester:** Spring/Summer 2014

**Course Description:** In this second of four courses on the Linux operating system, Linux System administration tasks are discussed and practiced. This course is designed to help prepare students for Linux Certification Exams. Students should be familiar with common Linux distributions and should be comfortable with basic installation and configuration to succeed in this course.

### 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

No Level Required

## **Requisites**

### **Prerequisite**

Academic Reading and Writing Levels of 6

### **Prerequisite**

Level II Prerequisite: CIS 121

## **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. Recognize and apply operating system terminology.

### **Assessment 1**

**Assessment Tool:** Short answer test

**Assessment Date:** Fall 2015

**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

### **Assessment 2**

**Assessment Tool:** Lab exercises

**Assessment Date:** Fall 2015

**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. Identify and apply basic system administration skills.

### **Assessment 1**

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**Assessment Date:** Fall 2015

**Assessment Cycle:** Every Three Years

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**Number students to be assessed:** All students

**How the assessment will be scored:** Departmentally-developed rubric

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### **Assessment 2**

**Assessment Tool:** Lab exercises

**Assessment Date:** Fall 2015

**Assessment Cycle:** Every Three Years

**Course section(s)/other population:** All sections

**Number students to be assessed:** All students  
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**Who will score and analyze the data:** Departmental faculty

3. Recognize basic security issues and apply procedures to secure a server.

**Assessment 1**

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**Assessment Date:** Fall 2015  
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**Course section(s)/other population:** All sections  
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**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:** Fall 2015  
**Assessment Cycle:** Every Three Years  
**Course section(s)/other population:** All sections  
**Number students to be assessed:** All students  
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4. Recognize and apply moderately advanced commands, programs and administrative tasks.

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**Assessment 2**

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**Course Objectives**

1. Recognize computer terminology and define or describe the words/acronyms.  
**Matched Outcomes**
2. Explain the functions or processes that are represented by computer terminology.  
**Matched Outcomes**
3. Set up system logging and analyze log output.  
**Matched Outcomes**
4. Install and configure X WINDOWS services.

**Matched Outcomes**

5. Design a hard disk partitioning scheme.

**Matched Outcomes**

6. Define sources of security threats.

**Matched Outcomes**

7. Configure system in a way that protects against security threats.

**Matched Outcomes**

8. Identify and install software programs that aid in securing the system.

**Matched Outcomes**

9. Recognize the steps in the standard boot process.

**Matched Outcomes**

10. Configure the syslog daemon to consolidate log output.

**Matched Outcomes**

11. Recognize TC/PIP network fundamentals.

**Matched Outcomes**

12. Recognize different features provided by UDP, TCP and ICMP.

**Matched Outcomes**

**New Resources for Course**

**Course Textbooks/Resources**

Textbooks

Manuals

Periodicals

Software

**Equipment/Facilities**

**Reviewer**

**Faculty Preparer:**

*Philip Geyer*

**Department Chair/Area Director:**

*John Trame*

**Dean:**

*Rosemary Wilson*

**Vice President for Instruction:**

*Bill Abernethy*

**Action**

*Faculty Preparer*

*Recommend Approval*

*Recommend Approval*

*Approve*

**Date**

*Dec 13, 2013*

*Dec 19, 2013*

*Dec 19, 2013*

*Jan 15, 2014*