

# Lassen Community College Course Outline

## CS 152 Operating Systems and You: Becoming a Power User 0.0 units

### I. Catalog Description

This is the third of five courses that aims to prepare students for a role as an entry-level IT Support Professional. Once all five courses are completed students will be eligible for the IT Support Professional Certificate. In this course through a combination of video lectures, demonstrations, and hands-on practice - students will learn about the main components of an operating system and how to perform critical tasks like managing software and users, and configuring hardware. This course covers a wide variety of IT topics and can be taken as a standalone course and will give students entry level IT skills in Linux, Linux File Systems, PowerShell and Command Line Interface. This course has been approved for online and hybrid delivery.

**Prerequisite(s):** None

Transferable: Not transferable

30 hours lecture

Scheduled: Fall & Spring

### II. Coding Information

Repeatability: Not Repeatable, Take 1 Time

Grading Option: Pass/No Pass

Credit Type: Non Credit

TOP Code: 070100

### III. Course Objectives

#### A. Course Student Learning Outcomes

Upon completion of this course the student will be able to:

1. Demonstrate knowledge of Windows and Linux file systems.
2. Apply the concepts of operating systems to setup users, groups and permissions on accounts
3. Identify appropriate troubleshooting procedures and apply them to real world scenarios.

#### B. Course Objectives

Upon completion of this course the student will be able to:

1. Navigate the Windows and Linux filesystems using a graphical user interface and command line interpreter.
2. Set up users, groups, and permissions for account access.
3. Install, configure, and remove software on the Windows and Linux operating systems.
4. Configure disk partitions and filesystems.
5. Understand how system processes work and how to manage them
6. Work with system logs and remote connection tools
7. Utilize operating system knowledge to troubleshoot common issues in an IT Support Specialist role.

### IV. Course Content

- A. Navigating the Systems
- B. Users and Permissions
- C. Package and Software Management
- D. Filesystems
- E. Process Management
- F. Operating Systems in Practice

## V. Assignments

### A. Appropriate Readings

1. Technical Support Journals
2. Microsoft online articles and Journals
3. Linux manuals, articles and Journals
4. Operating Systems articles and professional blogs

### B. Writing Assignments

Step by Step tutorials on how to install an operating systems, including troubleshooting practices and how to solve common problems.

### C. Quizzes

Weekly online quizzes

### D. Virtual labs

Qwiklabs activities to simulate hands on installation of Windows and Linux Operating systems.

## VI. Methods of Evaluation

### Traditional Classroom Evaluation

Term paper (topic choice, thesis statement, outline, bibliography, rough draft, final draft), homework (analysis of current economic problems), classroom discussion, essay, journals, and multiple choice problems.

### Hybrid Evaluation

All quizzes and exams will be administered during the in person class time. Students will be expected to complete online assignments and activities equivalent to in class assignments and activities for the online portion of the course. Electronic communication, both synchronous and asynchronous will be evaluated for participation and to maintain effective communication between instructor and students.

### Online Evaluation

A variety of methods will be used, such as: research papers, asynchronous and synchronous (chat/forum) discussions, online quizzes and exams, posting to online website and email communications using the districts approved learning management system.

## VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery

Correspondence Delivery

Hybrid Delivery

Online Delivery

**Traditional Classroom Delivery**

Lecture, discussion, audio/visual aids, demonstration, group exercises, guest speakers, lab, individualized programs and other as needed.

**Hybrid Delivery**

A combination of traditional classroom and online instruction will be utilized. Each semester a minimum of 17 hours, or 1/3 of the lecture hours, will be taught face-to face by the instructor and the remaining hours will be instructed online through the technology platform adopted by the District. Traditional class instruction will consist of exercises/assignments, lectures, visual aids, and practice exercises. Online delivery will consist of exercises/assignments, lecture posts, discussions, adding extra resources and other media sources as appropriate.

**Online Delivery**

A variety of methods will be used, such as: research papers, asynchronous and synchronous (chat/forum) discussions, online quizzes and exams, posting to online website and email communications using the districts approved learning management system.

**VIII. Representative Texts and Supplies**

All course materials, including readings and texts are available through Coursera

**IX. Discipline/s Assignment**

Computer Science, Computer Information Systems

**X. Course Status**

Current Status: Active

Original Approval Date: 12/01/2020

Course Originator: Melinda Duerksen

Board Approval: 12/15/2020

Chancellor's Office Approval: 01/21/2021

Revised by: Melinda Duerksen

Curriculum/Academic Standards Committee Revision Date:10/03/2023