Teacher: Steve Sabaugh

Unit Plan: UNIX and 'UNIX-like' Operating Systems

Grade and Content: AP Computer Science Principles

Date: Day 1

Lesson: Operating Systems In Depth

Overall Goal/Objective of Lesson (one sentence): A comprehensive review of operating systems with the 2 primary goals of 1) bringing the students up to speed with what they need to know about OS to understand the UNIX OS and 2) a college prep distillation of the most important information about OS to prepare them for future study.

Content Objectives (nouns)	Assessments
Students will understand the basics of OS functionality Students will understand the basics of OS purpose Students will have a comprehensive prep for certification exams and collegiate level classes on OS	
Skill/Language Objectives (verbs/Common Core Standards) - Students will be able to define and explain the 5 main categories of system calls - Students will be able to define and explain the main parts of an operating system - 9-12.NSD.2 Explain the levels of interaction existing between the application software, system software, and hardware of a computing system.	**Assessments** Students called on for definitions in their own words Notes in Journal

Materials
OS slide deck
Teacher's Laptop and projector

Student's Resource folder
Journal
Pen/Pencil

Sequence of Lesson Plan

Time Allotment	Mini-Lesson/Direct Instruction	Plans for Differentiation/ Culturally Responsive Instruction
35 minutes	*What information is essential for the student to know before beginning and will this skill be communicated? How will you be demonstrating this skill? Identify strategies to be used to determine if students have learned the objectives. The teacher models the process to be followed and makes connections to previous instruction. The teacher checks for student understanding. The teacher's explanation should be clear. Questions and tasks are higher order and have multiple possible answers.* 1. **Mini-Lesson:** Students will be called upon to read a slide. Teacher will explain in more detail, connecting to previous knowledge learned earlier in the semester. Teacher will also cue the students on how this will be germane to the upcoming unit and how it will be important for further study. Teacher will also make connections to OS experiences they already have in their personal computing lives with discussion.	-Mini-Lesson notes are completed in guided notes format, therefore being easier to copy and comprehend -Material is presented in clear and easy-to-follow format -Slide decks will be provided to the students

	Closure	Plans for Differentiation/ Culturally Responsive Instruction
10 minutes	*What method of review/assessment will be used to complete the lesson? Students will have an opportunity for reflection, sense-making, and closure. Teacher cites multiple approaches for those students who experience difficulties. The teacher conveys that the lesson is not "done" until all students understand or can demonstrate the skill.* 1. **Share-Out:** Teacher will ask students to review concepts they have learned in their own words	-Closure allows students to communicate with each other as well as hear definitions in student's own words