

# Curriculum Guide Computer Repair & Maintenance

## Sequoia Union High School District

**Course:** Computer Repair and Maintenance

**Description:**

This is a hands-on course where students learn to build and repair personal computers. The first semester is focused on hardware. Topics include: CPUs, memory, motherboards, bus types, ports, hard drives, CD ROMs, monitors, printers, USB and Firewire. Students work in the lab on working PCs to troubleshoot and diagnose problems. The second semester is focused on software. Topics include: Windows 98, Window 2000, Windows XP, OS installation, networking, drivers, antivirus software, system utilities and troubleshooting. Students who complete the course with a grade of B or better are eligible for Tech Prep credit at Cañada College. Interested students have the opportunity to take the CompTIA A+ exam.

**Prior Learnings/Prerequisites:**

Eighth-grade teacher recommendation for ninth-grade students

**Grade Level:** 9-12

**Length of Course:** 1 Year

**Units:** 10

**Meets Requirements for:**

- SUSHD Graduation
- SUHSD Technology Graduation Requirement
- Practical Arts
- Tech Prep Program

<b>Content Standards and Benchmarks</b>	<b>Teaching Strategies, Materials, Assessment</b>
<p>CDE IT Industry Sector Standards</p> <ul style="list-style-type: none"> <li>▪ 4.1.1 - ethics</li> <li>▪ 4.1.2 - communication systems</li> <li>▪ 4.1.3 - computer applications</li> <li>▪ 4.1.6 - project management</li> <li>▪ 4.1.7 - security</li> <li>▪ 4.1.8 - analysis &amp; design</li> <li>▪ 4.1.9 - technical resources</li> </ul>	<p>This is a hands-on course, where most of the time students perform tasks on a computer. The teacher demonstrates and models appropriate computer and software use and students demonstrate that use via various exercises out of the texts, materials created by the teacher, and materials available through the Internet. Through the Windows operating system, students create and organize folders. Students log into the classroom network, retrieve and save documents to network folders, and attach documents to e-mail. Students also print CAD documents that are displayed in the classroom and shared among students.</p> <p>Multiple-choice, short-answer questions, projects and authentic-assessment are utilized.</p>

**SUHSD Course (cont.):** Computer Repair and Maintenance

<p><b>Core Textbooks and Instructional Material</b> (See attached approved district list.)</p> <p>All work is online via the A+ program.</p>	<p><b>Prevention, Intervention and Extension Strategies</b> (Include strategies to address students in ESL, GATE, Special Ed., etc. How is instruction individualized?)</p> <p>The goal and expectation is for all students to succeed. Material is presented in several ways to facilitate effective learning: textbooks and written materials are provided; step-by-step visual handouts are provided; teacher-led instruction is provided, using the LCD projector or Vision system; individual instruction is provided; and hands-on learning is available every day.</p> <p>ESL: Some directions and exercises are available in Spanish. Student translators help explain strategies and directions when lessons are only available in English. Authentic assessment is utilized whenever possible.</p> <p>GATE: Lessons are sequenced to increase in difficulty, providing challenges for more advanced students. Students move at their own pace and are given beyond-plus projects.</p> <p>Special Ed. and 504: The student's IEP directs the curriculum.</p>
<p><b>Possible Correlation to Other Subject Areas</b> (Where could content, skills, resources, teaching strategies overlap?)</p> <p>Drafting, industrial arts courses, ROP Construction courses.</p>	<p><b>Professional Resources</b> (Websites, books, consultants, videos, etc.)</p> <ul style="list-style-type: none"><li>▪ Guest speakers</li><li>▪ Field trips</li></ul>
<p><b>Potential Articulation with Other Programs</b> (Community College, Tech Prep, ROP, Distance Learning, etc.)</p> <p>Course is provided by ROP Meets the qualifications for Tech Prep.</p>	<p><b>Other Pertinent Information</b></p>