

**COURSE OUTLINE OF RECORD**



**Palo Verde College**

**One College Drive, Blythe, CA 92225  
(760) 921-5500**

Course Control Number:

Course Outline Approval Dates		
	Curriculum Committee	Board of Trustees
Face-to-Face	3/14/13	4/16/13
Correspondence Ed.	3/14/13	4/16/13
Distance Ed.	3/14/13	4/16/13

**Course Information. Course Initiator:** Scott Peterson

Subject Area and Course Number: CIS 155		Course Title: <b>Managing Operating Systems</b>			
New Course <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Updated <input type="checkbox"/>		Static ID		<b>TOP Code 0701.00</b>	<b>Credit Status Request</b> <b>D=Credit-Degree Applicable</b>
Classification Code <b>Y=Credit Course</b>		<b>SAM Code</b> <b>C=Clearly occupational</b>			
<b>Noncredit category</b> <b>Y=Not Applicable; Credit Course</b>		Meets a unique need: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Course duplicated: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Demand/Enrollment Potential: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Transfer request <b>B=CSU only</b>		Articulation request: UC <input type="checkbox"/> CSU <input checked="" type="checkbox"/> CSU-GE <input type="checkbox"/> IGETC <input type="checkbox"/>			
<b>Basic Skills</b> <b>N=Not a Basic Skills Course</b>		<b>Funding Agency</b> <b>Y=Not Applicable</b>			Course Program Status <b>1=Program Applicable</b>
Co-Op Status <b>N=Not Part of a Co-Op Program</b>		Special Class Status <b>N=Course is Not a Special Class</b>			

**JUSTIFICATION FOR NEED:**

*(Briefly describe the primary method used to determine the need for this course. For example, Labor Market Projections from Employment Development Department, employer survey, community or student interest survey, state licensing requirements or mandated certification. A maximum of 4000 characters is allowed.)*

Students in today's competitive job market need advanced computer skills to remain competitive. Individuals will be addressing current and emerging trends as they relate to today's computing environments. Students will learn through hands on applications that will provide them with a valuable service as they prepare to complete certificate and degree programs as well as enhancing their understanding of computing to apply to real-world settings. This course is part of a certificate program as well as an AS degree offered by Palo Verde College in the Computer Information Systems Department.

**CATALOG DESCRIPTION:**

This course introduces operating system software as it relates to hardware installation. Topics include hardware compatibility, Bios configuration, troubleshooting common errors, device configuration and memory management. In addition, students will install, maintain, and optimize an operating system installation. This course will also focus on tools for solving operating system problems, fixing operating system problems, networking, security, and hardware support.

**SEMESTER UNITS:** 3

**Course Length: Lecture:** 36 **Laboratory:** 54 **Clinic/Field:**

**PRE-REQUISITES, CO-REQUISITES AND ADVISORIES:**

If the course has pre-requisites, co-requisites or advisories, list them here and attach a completed Pre-requisite Justification form.

None

## **COURSE OBJECTIVES:**

**Upon successful completion of the course the student will be able to:**

1. Explain how to use Windows utilities to manage hard drives.
2. Demonstrate how to optimize Windows to improve performance.
3. Install a Microsoft Operating system and update its components.
4. Prepare for a data disaster by keeping good backups of user data and Windows system files.
5. Describe various Windows tools that are useful to solve problems caused by hardware, applications, and failed Windows components.
6. Demonstrate what to do when a hardware device, application, or Windows component gives a problem.
7. Explain the protocols and standards Windows uses for networking.
8. Demonstrate how to connect a computer to a network.
9. Troubleshoot connectivity problems with network and client applications.
10. Authenticate and classify users so that you can control who has access to your resources and what users can do with them.
11. Demonstrate how to use BIOS security features.

## **STUDENT LEARNING OUTCOMES:**

1. Build a successfully running computer that consists of a correctly installed operating system, utility software, device drivers, and application software.
2. Demonstrate how to network a computer using TCP/IP and remotely access another computer and share files.

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## **COURSE OUTLINE AND SCOPE:**

### **1. Outline of topics or content:**

- A. Installing Windows
- B. Maintaining Windows
- C. Optimizing Windows
- D. Tools for Solving Windows Problems
- E. Fixing Windows Problems
- F. Networking Essentials
- G. Networking Practices
- H. Security Essentials
- I. Security Practices
- J. Supporting Notebooks
- K. Supporting Printers

### **2. If a course contains laboratory or clinic/field hours, list examples of activities or topics:**

- A. Step by Step Lessons following the textbook instructions
- B. "In the Lab" exercises from each chapter.
- C. Critical thinking and research exercises.

### **3. Examples of reading assignments:**

Students will be expected to complete all reading assignments prior to lectures and/or completing assigned coursework. Reading assignments may include, but are not limited to, chapters from the textbook and articles from current periodicals and the Internet.

### **4. Examples of writing assignments:**

Projects and writing assignments require students to produce written copy to demonstrate understanding of concepts. Writing assignments may include, but are not limited to, writing a two to three page paper based on a topic found in the textbook or an article from a current computer and/or Internet magazine.

### **5. Appropriate assignments to be completed outside of class:**

Homework assignments may include, but are not limited to, defining key terms, labeling diagrams, answering true or false and multiple choice questions. Students will also be expected to complete weekly reading assignments and laboratory exercises.

**6. Appropriate assignments that demonstrate critical thinking:**

Students are required to absorb a large amount of detailed information and also to demonstrate the use of the computer as a problem-solving device through the use of application programs. Students will need to determine how to best utilize software and hardware to resolve textbook exercises and examination problems. Projects and term papers will require students to generalize and extend the concepts from lectures and reading assignments to solve broader and more difficult assignments outside of class.

**7. Other assignments (if applicable):**

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**8. Face-to-Face Course Sections:**

**Face-to-face education** is a mode of delivery in which instruction is delivered in a traditional classroom setting, with instructor and students located simultaneously in the same classroom facility.

**a. Describe the methods of instruction.**

1. Lecture
2. Demonstration
3. Hands on
4. Directed Study

**b. Describe the methods of evaluating of student performance.**

1. Homework/Lab Assignments
2. Writing Assignments
3. Chapter Tests
4. Projects
5. Final Exam

**c. Describe how the confidentiality of the student's work and grades will be maintained.**

Instructors shall make reasonable efforts to protect the confidentiality of students' grades and graded work consistent with practices described in the Family Education Rights and Privacy Act (FERPA).

**d. If the course has a lab component, describe how lab work is to be conducted and how student work is to be evaluated.**

Lab components may be used for some selected studies in the CIS field. In the event that a lab component is utilized, students will be expected to spend time in the PVC computer lab or on a computer that has the appropriate software relating to the course in order to work on skills relating to specific course objectives and learning outcomes. The instructor will collect completed lab work, grade the work, and return all work to the student.

**Note: Students will be encouraged by instructors of this course to direct themselves to the College's Disabled Students' Programs and Services (DSP&S) department if they believe they have a learning disability.**

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**9. Correspondence Education Course Sections (correspondence, hybrid correspondence)**

**Correspondence education** is a mode of delivery in which instructional materials are delivered by mail, courier or electronic transmission to students who are separated from the instructor by distance. Contact between instructor and student is asynchronous. **Hybrid correspondence education** is the combination of correspondence and face-to-face interaction between instructor and student.

**a. Describe the methods of instruction.**

Assignments will be provided to students in the form of textbook reading, supplemental readings, self-directed assignments, instructor directions, or all four.

**b. Describe the methods of evaluating student performance.**

Regular, effective contact includes, but is not limited to, exams; quizzes; essays; research papers; graded homework assignments; syllabus receipt; and synchronous and asynchronous discussions, emails, letters, notes, phone calls, or postings on the Bridge between the instructor and student.

**c. Describe how regular, effective contact between the instructor and a student is maintained.**

Regular, effective contact includes, but is not limited to, exams; quizzes; essays; research papers; graded homework assignments; syllabus receipt; office hours; instant messaging; and synchronous online discussions, e-mails, letters, notes, phone calls, or postings on the Bridge between instructor and student.)

**d. Describe procedures that help verify the individual submitting class work is the same individual enrolled in the course section.**

Consistent with policy elements listed in the ACCJC's "Policy on Distance Education and on Correspondence Education," the College verifies the identity of a student who participates in class or coursework by using, at the College's discretion, such methods as a secure log-in and password, proctored examinations, or other technologies or practices that are developed and effective in verifying each student's identification.

**e. Describe procedures that evaluate the readiness of a student to succeed in a correspondence or hybrid correspondence course section.**

At the discretion of the instructor, the procedure might consist of a short assessment questionnaire prepared by the instructor and self-administered by the student. The questionnaire would evaluate areas such as working independently, adhering to timelines, and familiarity with working online and with computer technology. The student would use the resulting score to evaluate his or her readiness to take the course in a correspondence or hybrid correspondence instructional mode.

**f. Describe how the confidentiality of the student's work and grades will be maintained.**

Instructors shall make reasonable efforts to protect the confidentiality of students' grades and graded work consistent with practices described in the Family Education Rights and Privacy Act (FERPA).

**g. If the course has a lab component, describe how lab work is to be conducted and how student work is to be evaluated.**

Lab components may be used for some selected studies in the CIS field. In the event that a lab component is utilized, students will be expected to spend time in the PVC computer lab or on a computer that has the appropriate software relating to the course in order to work on skills relating to specific course objectives and learning outcomes. The instructor will collect completed lab work, grade the work, and return all work to the student.

**h. If the course requires specialized equipment, including computer and computer software or other equipment, identify**

the equipment, and describe how it is to be accessed by students.

The students will need access to a computer with a current Microsoft Operating System and access to the internet.

**Note: Students will be encouraged by instructors of this course to direct themselves to the College's Disabled Students' Programs and Services (DSP&S) department if they believe they have a learning disability.**

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## 10. Distance Education Course Sections (online, ITV, hybrid)

**Online education** is a mode of delivery in which all instruction occurs online via the Internet. Student and instructor access to email and the Internet is required. Students are required to complete class work using email, chat rooms, discussion boards and other instructional online venues.

**Interactive television (ITV)** is a mode of synchronous delivery in which instruction occurs via interactive television (closed circuit). **Hybrid** instruction is a combination of face-to-face instruction and online instruction.

### a. Describe the methods of instruction.

Online Education: Instructional materials, including readings, assignments, background materials, tests and quizzes are posted to Palo Verde College's Bridge website for review by students. Instructors may also conduct discussions with students via the Internet.

Hybrid: Combines online instruction with face-to-face instruction and may consist of a combination of Internet based instruction and face-to-face instruction in a traditional classroom.

ITV: Instruction is conducted synchronously on closed-circuit television, typically on the Blythe main campus and the Needles Center.

Correspondence: Instruction is conducted through handouts, PowerPoint Presentations, video tutorials, supplementary handouts, textbook, as well as correspondence through the Bridge.

### b. Describe the methods of evaluating student performance.

Performance on graded assignments, written assignments, in class projects, lab work, tests and quizzes.

### c. Describe how regular, effective contact between the instructor and a student is maintained.

Regular, effective contact includes, but is not limited to, exams; quizzes; essays; research papers; graded homework assignments; syllabus receipt; office hours; instant messaging; and synchronous online discussions, e-mails, letters, notes, phone calls, or postings on the Bridge between instructor and student.)

### d. Describe procedures that help verify the individual submitting class work is the same individual enrolled in the course section.

Consistent with policy elements listed in the ACCJC's "Policy on Distance Education and on Correspondence Education," the College verifies the identity of a student who participates in class or coursework by using and the College's discretion, such methods as a secure log-in and password, proctored examinations, or other technologies or practices that are developed and effective in verifying each student's identification.

### e. Describe procedures that evaluate the readiness of a student to succeed in an online, ITV or hybrid course section.

At the discretion of the instructor, the procedure might consist of a short assessment questionnaire prepared by the instructor and self-administered by the student. The questionnaire would evaluate areas such as working independently, adhering to timelines, and familiarity with working online and with computer technology. The student would use the resulting score to evaluate his or her readiness to take the course in a correspondence or hybrid correspondence instructional mode.

### f. Describe how the confidentiality of the student's work and grades will be maintained.

Instructors shall make reasonable efforts to protect the confidentiality of students' grades and graded work consistent with practices

described in the Family Education Rights and Privacy Act (FERPA).

- g. If the course has a lab component, describe how lab work is to be conducted and how student work is to be evaluated.**

Lab components may be used for some selected studies in the CIS field. In the event that a lab component is utilized, students will be expected to spend time in the PVC computer lab or on a computer that has the appropriate software relating to the course in order to work on skills relating to specific course objectives and learning outcomes. The instructor will collect completed lab work, grade the work, and return all work to the student.

- h. If the course requires specialized equipment, including computer and computer software or other equipment, identify the equipment, and describe how it is to be accessed by students.**

The students will need access to a computer with a current Microsoft Operating System and access to the internet.

**Note: Students will be encouraged by instructors of this course to direct themselves to the College's Disabled Students' Programs and Services (DSP&S) department if they believe they have a learning disability.**

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**REPRESENTATIVE TEXTBOOKS AND OTHER READING AND STUDY MATERIALS:**

**List author, title, and current publication date of all representative materials.**

CompTia A+ Guide to Managing and Maintaining Your PC – Seventh Edition, Course Technology 2010

Selected current articles from periodicals and the Internet may also be used.

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**SIGNATURES:**

**COURSE INITIATOR:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**LIBRARY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**CHAIR OF CURRICULUM COMMITTEE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**SUPERINTENDENT/PRESIDENT:** \_\_\_\_\_ **DATE:** \_\_\_\_\_