Form Version: February 2001 EFFECTIVE TERM: FALL 2004

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

x Transfer Course x A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: CSIS 105 Computer Concepts and Microcomputer Applications

UNIT VALUE: 3

MINIMUM NUMBER OF SEMESTER HOURS: 64

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills.

ENTRANCE REQUIREMENTS

PREREQUISITE: None

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

Computer literacy covering fundamental concepts of computer hardware, software, and information systems. Includes state-of-the-art technology, structured design techniques, and an overview of the real-world environment of the computer industry. Hands-on introduction to the Windows Operating Systems, and word processing, spreadsheet, database and presentation graphics application programs. Participants will also learn how to use Internet tools to search for information, transfer files, send and receive email messages, access applications.

SPECIFIC COURSE OBJECTIVES: The successful student will be able to:

1. Analyze the components of an information system.
2. Identify and compare the functions of general application packages including word processors, spreadsheets, and databases.
3. Explain the procedures and equipment that are a part of the information processing cycle.
4. Identify data communications equipment and concepts.
5. Distinguish between systems and application software.
6. Analyze the steps in the systems development life cycle.
7. Explain computer related career opportunities.
8. Identify trends and issues of the information age.

9. Solve problems using general application packages on microcomputers
10. Identify the features of the Internet and the World Wide Web.
11. Explain the Internet addressing scheme.
12. Demonstrate the usage of a web browser.
13. Download and save files and programs.
14. Discriminate between types of search engines, multi-threaded engines, subject specific s search engines and specialized subject directories.
15. Effectively use Boolean AND and OR in contructing a search argument.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

I. An Introduction to Computers
   A. What is a computer
   B. Hardware and Software
   C. Information Processing Systems
   D. Computer Personnel
   E. Evolution of the computer industry

II. General Applications
   A. Word processing
   B. Spreadsheet
   C. Database
   D. Graphics

III. Processing Data on a Computer
   A. Data Organization
   B. Arithmetic and Logical Operations
   C. Basic Storing and Updating Concepts

IV. Input to the Computer
   A. Types of input
   B. Input devices
   C. User interfaces
   D. Ergonomics

V. Processor Unit
   A. Functions of the processor unit
   B. How data is stored
   C. Executing Instructions on the Computer
   D. Types of Main Computer Memory

VI. Output from the computer
   A. Common types of output
   B. Printers, screens, plotters and other output devices
   C. Voice output

VII. Auxiliary Storage
   A. Types of storage
   B. Magnetic Disk and tape storage devices
   C. Methods utilized in storage operations

VIII. File Organization and Databases
- A. Types of file organization
- B. Types of Databases
- C. Database management systems
- D. Query languages

IX. Data Communications
- A. Hardware and software requirements
- B. Communication channels
- C. Line configurations and networks
- D. Transmission media and methods

X. Operating Systems and Systems Software
- A. Types of operating systems
- B. Popular operating systems
- C. Capabilities of operating systems
- D. Systems maintenance

XI. Identify the features of the Internet and the World Wide Web
- A. Explain the Internet addressing scheme
- B. Demonstrate the usage of a web browser
- C. Access web pages, download/save files, and search for information on the Internet
- D. Effectively use ftp and e-mail

REQUIRED READING:

Eisch, Krueger, et al. *WordPerfect Office Integrated Course 2000*
South-Western Education Publishing *2000*

SUGGESTED READING: None

REQUIRED WRITING:
During the semester each student will be required to write a report (minimum of 2 pages) on a selected topic in the field of computers and information processing. Other written and laboratory software assignments chosen by individual instructors as assignments.

OUTSIDE ASSIGNMENTS:
Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Reading the required text, 45-70 hours; writing a report on a selected topic, 10-12 hours; selected review and study assignments chosen by the individual instructors,

15 - 30 hours. Reading application text, 20 to 40 hours. Application software assignments, 10 - 20 hours.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:
_x_ lecture

_____ laboratory
_x_ lecture-laboratory combination
_____ directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.
Yes _x_ No____

If yes, check all that apply:

_____ Television Course (Video one-way, e.g. ITV, video cassette, etc.)
_x_ Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
_____ Two-Way Video Conferencing (Two-way interactive video and audio)
_____ One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
_____ Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

Tests:	15%
Reports:	10%
Lab assignments:	45%
Final Exam:	30%

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?
Yes ____ No _x_ Number of times course may be taken for credit: ____

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON: Steve Perry x2990

SIGNATURES ON FILE: