Palo Verde College

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Course Control Number: CCC000402022		
Course Outline Approval Dates		
Modality	Curriculum Committee	Board of Trustees
Face-to-face	4/11/19	5/14/19
Correspondence Ed.	4/11/19	5/14/19
Distance Ed.	4/11/19	5/14/19

COURSE OUTLINE OF RECORD

Course Information

Course Initiator: Scott Peterson				
CB01 - Subject and Course #: CIS 248				
CB02 - Course Title: Systems Analysis and Design				
New Course: ☐	Non-Substantial: ☒	Substantial: ☐		
Articulation Request:	☒ UC	☒ CSU	☐ CSU-GE	☐ IGETC
Lecture Hours: 54	Laboratory Hours:	Clinical/Field Hours:		
CB06/CB07: Course Units: 3.0				
Prerequisites:				
Co-requisites:				
Advisories: Recommended: CIS 101 - Introduction to Computers				

CB03 - TOP Code:	0707.30 - Computer Systems Analysis
CB04 - Credit Status:	D - Credit - Degree Applicable
CB05 - Transfer Status:	A - Transferable to both UC and CSU
CB08 - Basic Skills Status:	N - Course is not a basic skills course
CB09 - SAM Priority Code:	B - Advanced Occupational
CB10 - Cooperative Work:	N - Is not part of Cooperative Work Experience Education Program
CB11 - Course Classification:	Y - Credit Course
CB13 - Approved Special:	N - Course is not a special class
CB21 - Prior Transfer Level:	Y - Not Applicable
CB22 - Noncredit Category:	Y - Credit Course
CB23 - Funding Agency:	Y - Not Applicable
CB24- Program Status:	1 - Program Applicable
Transfer Request:	A= UC and CSU

Please select the appropriate box(s) of the modalities in which this course will be offered, and fill out the appropriate sections for that mode.

☒ Face-to-Face – Section B
☒ Correspondence Education – Section C
☒ Distance Education – Section D

JUSTIFICATION OF NEED:

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 three certificates of preparation offered by Palo Verde College in the Computer Information Systems Department.

CATALOG DESCRIPTION:

This course discusses the procedures and techniques necessary for implementing a new computer system or modifying an existing computer system. The course addresses both large computing systems and micro-computing systems. Hardware and software considerations are discussed.

COURSE OBJECTIVES:

Objectives:

1. Analyze the components of systems analysis and design using traditional development and current technologies.
2. Identify and compare the functions and requirements of the five phases of systems development life cycle (SDLC).
3. Distinguish between the different functions in the SDLC and demonstrate their application.
4. Demonstrate how the SDLC is used in different businesses and social environments.
5. Discern the differences in the five phases that make up SDLC and how they are implemented in real-world environment.
6. Investigate the use of the Internet as an online research tool for gathering information dealing with SDLC.

STUDENT LEARNING OUTCOMES:

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

SLO#1: Identify and compare the functions and requirements of the five phases of Systems Development Life Cycle (SDLC).

SLO#2: Build a context diagram based on a problem/case scenario.

SLO#3: Model attributes in an ER diagram based on a problem/case scenario.

A. COURSE OUTLINE AND SCOPE

1. Outline of topics or content:

A. Introduction to Information Systems
B. Systems Planning (Phase 1)
C. Systems Analysis (Phase 2)
D. Analyzing Requirements
E. Evaluating Alternatives and Strategies
F. Systems Design (Phase 3)
G. File and Data Design
H. System Architecture
I. System Implementation (Phase 4)
J. Installation and Evaluation
K. System Operation and Support (Phase 5)
L. Communication Tools

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

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 from the text and a two to three page paper on a topic found in the textbook or an article from a current periodical or the Internet.

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):

Students may be required to take a pre-test and post-test in order to measure student learning outcomes. Pre-test grades will not be included in the overall course grade but the student will receive points for participation.

☐ Check if Section B is not applicable

B. 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.

1. Describe the methods of instruction:

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

2. Describe the methods of evaluating of student performance.

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

3. 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).

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

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.

☐ Check if Section C is not applicable

C. 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 students is asynchronous.
Hybrid correspondence education
is the combination of correspondence and face-to-face interaction between instructor and student.

1. Describe the methods of instruction.

Methods of instruction may include, but are not limited to, the following:

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

2. Describe the methods of evaluating student performance.

The methods of evaluating student performance may include, but are not limited to, the following:

a. Quizzes
b. Exams
c. Writing Assignments
d. Portfolio Projects
e. Assignments

3. 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.

4. 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.

5. 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.

6. 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).

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

8. 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.

There is a likelihood that students will need access to a computer that has an internet connection and the appropriate software for each particular course. The software will be available in the PVC Computer Lab. Students may have access to the software at another location that allows them to complete course requirements at a separate location.

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.

☐ Check if Section D is not applicable

D. 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.

1. 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 discussion sessions 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.

Methods of instruction may include, but are not limited to, the following:

a. Directed Study
b. Internet Research
c. Tutorial Handouts
d. Textbook Research
e. Lecture Handouts, Notes, Digital Content

2. Describe the methods of evaluating of student performance.

The methods of evaluating student performance may include, but are not limited to, the following:

a. Quizzes
b. Exams
c. Writing Assignments
d. Projects
e. Chapter Assignments
f. Threaded Discussions

3. 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; online discussions; e-mails; letters; notes; phone calls; or postings on the Bridge between instructor and student.

4. 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.

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

A short assessment questionnaire will by prepared by the instructor and self-administered by the student. The questionnaire will 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 an online, ITV or hybrid instructional mode.

6. 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).

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

8. 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.

There is a likelihood that students will need access to a computer that has an internet connection and the appropriate software for each particular course. The software will be available in the PVC Computer Lab. Students may have access to the software at another location that allows them to complete course requirements at a separate location.

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.

E. REPRESENTATIVE TEXTBOOKS AND OTHER READING AND STUDY MATERIALS:
List author, title, and current publication date of all representative materials.

This course will use a general text covering concepts and functions of system analysis and design in a computing environment. This text will also cover projects and case studies.

System Analysis and Design 11th Ed., Tilley and Rosenblatt, 2017, Cengage Learning

Selected current articles from online newsgroups, wikis, and periodicals may also be used.

SIGNATURES

COURSE INITIATOR: _____ DATE: _____

DIVISION CHAIR: _____ DATE: _____

LIBRARY: _____ DATE: _____

CHAIR OF CURRICULUM COMMITTEE: _____ DATE: _____

SUPERINTENDENT/PRESIDENT: _____ DATE: _____