

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: PKS 120 Principles of Plant Growth

UNIT VALUE: 3

MINIMUM NUMBER OF SEMESTER HOURS: 48

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills.

ENTRANCE REQUIREMENTS

PREREQUISITE: None.

COREQUISITE: None.

RECOMMENDED PREPARATION: None.

SCOPE OF COURSE:

Plant growth and functions; the basic principles of soil and fertilizer science; the growth of plants in relation to the environmental factors of temperature, water, and light; the cycles of vegetative and reproductive growth.

SPECIFIC COURSE OBJECTIVES:

Students will be able to:

1. Identify the leaf, stem, root, flower, and their roles in the plant system.
2. Identify terminology commonly used in the fields of horticulture, floriculture, landscaping, gardening, and general agriculture.
3. Analyze and compare soil samples.
4. Observe and analyze differences of various plants and trees such as size, color, texture, smell, and fruit types.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Stem
 - A. Internal structures
 - B. External structures
- II. Leaf
 - A. Transpiration
 - B. Photosynthesis

- III. Root
 - A. Structure
 - B. Function
- IV. Flower
 - A. Structure
 - B. Reproduction processes
- V. Soil
 - A. Soil nutrients
 - B. Organic materials
- VI. Water
 - A. Plant needs and uses
 - B. Movement of water in plants
 - C. Translocation of nutrients in plants
- VII. Plant Uses
 - A. Economic
 - B. Cultural
 - C. Social
 - D. Esthetics
 - E. Political
- VIII. Culture
 - A. Plant food requirements
 - B. Soil enhancements

REQUIRED READING:

Parker, Rick. Introduction to Plant Science. 1st edition. Albany, NY: Delmar Publishers, 2001.

SUGGESTED READING:

Hartman, Jim. Plant Science Growth Development and Utilization. Englewood Cliffs: Prentice Hall, 1987.

Sunset Western Book.

REQUIRED WRITING:

Two-page written report on an assigned horticulture topic.

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.

Read assigned textbook assignments. Study lecture notes. Prepare report/presentation.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- 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 No

If yes, check all that apply:

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- 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):

Grading system is determined on a simple numerical value. Three exams are given during the course, which are prepared to be comprehensive from first chapter studied.

Exam I	40 pts.	A = 225 - 203
Exam II	40 pts.	B = 202 - 180
Final Exam	55 pts.	C = 179 - 156
Quizzes	40 pts.	D = 155 - 135
Report/Presentation	<u>50 pts.</u>	F = 134 - below
	225 pts.	

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes No Number of times course may be taken for credit: 1

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

CONTACT PERSON: Director, Vocational Programs, Ext. 2286

SIGNATURES ON FILE