

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: CHEM 196 Special Laboratory Problems in Chemistry

UNIT VALUE: 2

MINIMUM NUMBER OF SEMESTER HOURS: 96

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills.

ENTRANCE REQUIREMENTS

PREREQUISITE: CHEM 105, or CHEM 110 and CHEM 110L; approval of project or research by department chairperson.

COREQUISITE:

RECOMMENDED PREPARATION:

SCOPE OF COURSE:

Special laboratory investigations with emphasis upon the use of chemical instrumentation and newer chemical techniques in the synthesis of compounds and/or the investigation of problems in the fields of inorganic, analytical or organic chemistry.

SPECIFIC COURSE OBJECTIVES:

The course objectives will depend on the specific project or research. Specific objectives are to be determined by the instructor and student and will be detailed in a written contract.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

The content will vary with each project or research selected by the student in conference with the instructor and will be detailed in the written contract.

REQUIRED READING:

No textbook is required; however, it will be necessary for the students to consult advanced textbooks, journals, and laboratory reference works in the development of their planned laboratory investigation.

SUGGESTED READING: None

REQUIRED WRITING:

1. Laboratory notebook and data journal.
2. Final laboratory report which will include in introduction, data presentation, discussion or results and conclusion plus references.

The total amount of writing included in the above should approximate 15 full written pages.

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.

Assignments include the reading of any material appropriate to the theory and operation of chemical instrumentation to be used in the special laboratory problem. Also, any other published material relating to the special laboratory problem will be included. All of these materials are located in the library and/or department.

INSTRUCTIONAL METHODOLOGY:**Check all that apply:**

- lecture
 laboratory
 lecture-laboratory combination
 directed study

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):

1. 50% of course grade based on record book
2. 50% of course grade based on final report

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

Yes No Number of times course may be taken for credit: 2.

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

CONTACT PERSON: David Boyajian

SIGNATURES ON FILE
