

**PALOMAR COLLEGE**  
**COURSE OUTLINE OF RECORD FOR**  
**DEGREE CREDIT COURSE**

Transfer course     A.A. degree applicable course  
(check all that apply)

**COURSE NUMBER AND TITLE:** CHEM 295: Directed Study in Chemistry

**UNIT VALUE:** 1,2,3

**MINIMUM NUMBER OF SEMESTER HOURS:** 48, 96, 144

**BASIC SKILLS REQUIREMENTS:** Appropriate language and computational skills (if appropriate)

**ENTRANCE REQUIREMENTS**

**PREREQUISITE:** Approval of project or research by department chairperson

**COREQUISITE:** None

**RECOMMENDED PREPARATION:** None

**SCOPE OF COURSE:**

Independent study for students who have demonstrated skills and/or proficiencies in chemistry subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor. *May be taken four times for a maximum of six units.* CSU;UC

**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:**

College-level reading assignments will be selected by the student in conference with the instructor.

**SUGGESTED READING:**

Suggested reading may be selected by the student in conference with the instructor.

**REQUIRED WRITING:**

A paper on the approved project or research unless problem solving exercises or skills demonstrations by the students are more appropriate. The length will depend upon the nature of the project or research and will be detailed in the written contract.

**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.**

By design, all project and research activities are independent. Outside assignments will be detailed in the written contract. This activity may include any or all of the following: reading; writing and critiquing; researching; summarizing, analyzing and/or evaluating research material; problem solving; and skills demonstration.

**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 X

**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):

This will vary with the project or research and will be detailed in the written contract.

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

Yes X No \_\_\_\_\_ Number of times course may be taken for credit: 4

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

58161 (c) (2) (A and B)

**CONTACT PERSON:** David Boyajian

**SIGNATURES ON FILE**