CHEM 49 Course Outline as of Fall 2022

CATALOG INFORMATION

Dept and Nbr: CHEM 49 Title: INDEPENDENT STUDY
Full Title: Independent Study in Chemistry
Last Reviewed: 2/28/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	0	17.5	Lecture Scheduled	0
Minimum	1.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	1.00		Contact DHR	17.50
		Contact Total	1.00		Contact Total	17.50
		Non-contact DHR	8.00		Non-contact DHR	140.00

Total Out of Class Hours: 0.00 Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

Catalog Description:
Literature, laboratory, or field research in chemistry, by arrangement, to provide for independent study. UC determines credit AFTER transfer; not counted for admission. (See a counselor for details.)

Prerequisites/Corequisites:
Course Completion of CHEM 1B OR CHEM 3B OR CHEM 4B

Recommended Preparation:

Limits on Enrollment:
Approval of the project proposal by sponsoring faculty, Department Chair and Supervising Administrator.

Preliminary application (written description of project objectives and methods, selection of faculty supervisor, list of required equipment and supplies) must be submitted to department chairperson one semester in advance.

Schedule of Classes Information:
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independent study. UC determines credit AFTER transfer; not counted for admission. (See a counselor for details.) (Grade Only)
Prerequisites/Corequisites: Course Completion of CHEM 1B OR CHEM 3B OR CHEM 4B
Recommended:
Limits on Enrollment: Approval of the project proposal by sponsoring faculty, Department Chair and Supervising Administrator.

Preliminary application (written description of project objectives and methods, selection of faculty supervisor, list of required equipment and supplies) must be submitted to department chairperson one semester in advance.
Transfer Credit: CSU;UC.
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**			Effective:	Inactive:
CSU GE:	**Transfer Area**			Effective:	Inactive:
IGETC:	**Transfer Area**			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 1981	Inactive:	
UC Transfer:	Transferable	Effective:	Fall 1981	Inactive:	

CID:

Certificate/Major Applicable:
Not Certificate/Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Expand their knowledge base in a chosen area of chemistry through independent research.

Objectives:
At the conclusion of this course, the student should be able to:
1. Design a chemistry-related independent study project.
2. Perform scientific literature, laboratory, and/or field research relevant to the project.
3. Present the results of the study in written, visual, and/or oral format.

Topics and Scope:

Content will vary with the student, but will expand upon the department’s regular offerings and capitalize on the student's special interests or abilities.

Assignment:

Assignments to be arranged between the student and the instructor.
These may include:
1. Term paper(s)

2. Literature report(s)
3. Interpretation of research
4. Lab and field research
5. Oral presentation(s)

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Literature reports, term papers	Writing 20 - 80%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Interpretation of research	Problem solving 20 - 80%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Lab and field research	Skill Demonstrations 0 - 30%

Exams: All forms of formal testing, other than skill performance exams.

None	Exams 0 - 0%

Other: Includes any assessment tools that do not logically fit into the above categories.

Oral presentation of results, experiment and/or field research design.	Other Category 0 - 30%

Representative Textbooks and Materials:
Text will vary with content.