

PHYS 49 Course Outline as of Fall 2022**CATALOG INFORMATION**

Dept and Nbr: PHYS 49 Title: INDEPENDENT STUDY

Full Title: Independent Study in Physics

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	3	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:

Independent research project in physics to provide for an enriched academic experience. UC determines credit after transfer; not counted for admission. (See a counselor for details.)

Prerequisites/Corequisites:**Recommended Preparation:****Limits on Enrollment:**

Approval of the project proposal by sponsoring faculty, Department Chair and Supervising Administrator.

Schedule of Classes Information:

Description: Independent research project in physics to provide for an enriched academic experience. UC determines credit after transfer; not counted for admission. (See a counselor for details.) (Grade Only)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment: Approval of the project proposal by sponsoring faculty, Department Chair

and Supervising Administrator.

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:
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CSU Transfer:	Transferable	Effective:	Spring 1983	Inactive:
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UC Transfer:	Transferable	Effective:	Spring 1983	Inactive:
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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 upon their foundational knowledge and skills through independent research projects.

Objectives:

At the conclusion of this course, the student should be able to:

1. Find relevant resources for investigating a physics research project.
2. Present the results of a research project in written or oral form.
3. Achieve the objectives outlined in the special studies application.

Topics and Scope:

A physics topic or topics that build upon the Physics department's regular offerings. Content will vary depending on student interest and instructor availability. Typically, the course involves a project with a literature research phase, an experimentation phase, and a presentation phase.

Assignment:

Assignments will be outlined in the special studies application.

Possible projects may include:

1. Presentation of a poster project
2. Submission of a research paper
3. Construction of a physics demo or experiment

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.

Research paper and/or poster

Writing
10 - 100%

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

Physics demonstration or experiment

Problem solving
0 - 90%

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

None

Skill Demonstrations
0 - 0%

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.

None

Other Category
0 - 0%

Representative Textbooks and Materials:

Written resources will vary with project content.