

PHYS 500: MASTER'S THESIS

In Workflow

1. PHYS Committee Chair (mikkel.jensen@csus.edu)
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Approval Path

1. Fri, 13 Sep 2024 20:33:26 GMT
Mikkel Jensen (mikkel.jensen): Approved for PHYS Committee Chair
2. Fri, 13 Sep 2024 20:33:45 GMT
William DeGraffenreid (degraff): Approved for PHYS Chair
3. Wed, 16 Oct 2024 22:51:31 GMT
Mikkel Jensen (mikkel.jensen): Approved for NSM College Committee Chair
4. Mon, 21 Oct 2024 20:35:32 GMT
Chris Taylor (ctaylor): Approved for NSM Dean

New Course Proposal

Date Submitted: Wed, 11 Sep 2024 16:33:37 GMT

Viewing: PHYS 500 : Master's Thesis

Last edit: Wed, 16 Oct 2024 22:51:21 GMT

Changes proposed by: Rodolfo Barniol Duran (219696192)

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Catalog Title:

Master's Thesis

Class Schedule Title:

Master's Thesis

Academic Group: (College)

NSM - Natural Sciences & Mathematics

Academic Organization: (Department)

Physics and Astronomy

Will this course be offered through the College of Continuing Education (CCE)?

No

Catalog Year Effective:

Fall 2025 (2025/2026 Catalog)

Subject Area: (prefix)

PHYS - Physics

Catalog Number: (course number)

500

Course ID: (For administrative use only.)

TBD

Units:

1-6

Is the ONLY purpose of this change to update the term typically offered or the enforcement of existing requisites at registration?

No

In what term(s) will this course typically be offered?

Fall, Spring

Does this course require a room for its final exam?

No, final exam does not require a room

Does this course replace an existing experimental course?

No

This course complies with the credit hour policy:

Yes

Justification for course proposal:

Physics 500, is one of the possible culminating experiences proposed as part of a new Master of Science in Physics. The MS program is designed to allow flexibility for students to prepare for PhD programs or to prepare for a career in teaching, industry or government. The MS in Physics will provide a locally accessible pathway for students interested in pursuing advanced physics degrees. Diversity in physics will be increased by supporting the CSUS community of students at the graduate level. Many of our underrepresented and low-income students are helping to support families while studying and would be unable to pursue graduate education outside of the Sacramento region. Across the country women and underrepresented groups face barriers at entry and at each step throughout their physics careers.

Course Description: (Not to exceed 90 words and language should conform to catalog copy.)

Master's thesis: This is a culminating experience for the master's program. Completion of a written thesis and an oral presentation approved for the master's degree. Should be taken in the final semester prior to the completion of all requirements for the degree.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Is this course designated as Curricular Community Engaged Learning?

No

Does this course require safety training?

No

Does this course require personal protective equipment (PPE)?

No

Does this course have prerequisites?

Yes

Prerequisite:

Advancement to candidacy and permission of the graduate coordinator.

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites?

No

Graded:

Credit / No Credit

Approval required for enrollment?

Department Approval

Course Component(s) and Classification(s):

Thesis Research

Thesis Research Classification

S3/CS#25 - Practice Teaching/Workstudy/Thesis Project/Independent Study (S-factor=.5 WTU per student enrolled)

Thesis Research Units

1-6

Is this a paired course?

No

Is this course crosslisted?

No

Can this course be repeated for credit?

Yes

How many times can the course be taken (including first time passed)?

2

Total credits allowed (including first time passed)

6

Can the course be taken for credit more than once during the same term?

No

Description of the Expected Learning Outcomes and Assessment Strategies:

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre- and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Conduct an original research investigation in the field of physics/ astronomy.	Oral presentation and written thesis.
2	Communicate in writing an original research investigation in physics/astronomy and its broader significance in a thesis.	Oral presentation and written thesis.
3	Critically analyze findings in the physics/astronomy literature and integrate those findings into an appropriate theoretical and discipline-specific context in a thesis.	Oral presentation and written thesis.
4	Communicate orally an original research investigation in physics/ astronomy and its broader significance.	Oral presentation.

Attach a list of the required/recommended course readings and activities:

PHYS 500 MastersThesis.pdf

For whom is this course being developed?

Majors in the Dept

Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Graduate (Masters) Learning Goals:

Disciplinary knowledge
Communication
Critical thinking/analysis
Information literacy
Professionalism

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

Is this a Graduate Writing Intensive (GWI) course?

No

Key: 14762