

PHYS M80: INTERNSHIP IN PHYSICS

Originator

ereese

College

Moorpark College

Discipline (CB01A)

PHYS - Physics

Course Number (CB01B)

M80

Course Title (CB02)

Internship in Physics

Banner/Short Title

Internship in Physics

Credit Type

Credit

Start Term

Fall 2022

Catalog Course Description

Provides on-the-job learning to develop effective work habits, attitudes, and career awareness in paid or unpaid internships that are related to the discipline. Involves the development and documentation of learning objectives and the completion of an internship paper, presentation, or project. Includes both workplace supervisor and faculty adviser feedback and/or written evaluations. Course Credit Limitation: To take the course, contact the Career Transfer Center. Requires orientation session. Students receive one unit of credit for each 60 hours unpaid or 75 hours paid work. May enroll in up to 4 units a semester with a maximum of 16 total units of any type of work experience.

Taxonomy of Programs (TOP) Code (CB03)

4932.00 - *General Work Experience3

Course Credit Status (CB04)

D (Credit - Degree Applicable)

Course Transfer Status (CB05) (select one only)

B (Transferable to CSU only)

Course Basic Skills Status (CB08)

N - The Course is Not a Basic Skills Course

SAM Priority Code (CB09)

D - Possibly Occupational

Course Cooperative Work Experience Education Status (CB10)

N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)

Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)

N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)

Y - Not Applicable

Course Noncredit Category (CB22)

Y - Credit Course

Funding Agency Category (CB23)

Y - Not Applicable (Funding Not Used)

Course Program Status (CB24)

2 - Not Program Applicable

General Education Status (CB25)

Y - Not Applicable

Support Course Status (CB26)

N - Course is not a support course

Field trips

Will not be required

Grading method

(L) Letter Graded

Alternate grading methods

(O) Student Option- Letter/Pass

(P) Pass/No Pass Grading

Does this course require an instructional materials fee?

No

Repeatable for Credit

Yes

Number of times a student may enroll in this course

4

Specify the Title 5 justification for repeatability

Cooperative Work Experience Education (§ 55253)

Justification for Repeatability

This is a cooperative work experience education course and is therefore repeatable up to 16 units as provided in Title 5, Section 55253.

Is this course part of a family?

No

Units and Hours

Carnegie Unit Override

No

In-Class

Lecture

Activity

Laboratory

Total in-Class

Total in-Class

Outside-of-Class

Internship/Cooperative Work Experience

Paid

Minimum Paid Internship/Cooperative Work Experience Hours

75

Maximum Paid Internship/Cooperative Work Experience Hours

300

Unpaid

Minimum Unpaid Internship/Cooperative Work Experience Hours

60

Maximum Unpaid Internship/Cooperative Work Experience Hours

240

Total Outside-of-Class

Total Outside-of-Class

Total Student Learning

Total Student Learning

Total Minimum Student Learning Hours

60

Total Maximum Student Learning Hours

300

Minimum Units (CB07)

1

Maximum Units (CB06)

4

Prerequisites

Completion of or concurrent enrollment in one course in the discipline and instructor approval

Student Learning Outcomes (CSLOs)

Upon satisfactory completion of the course, students will be able to:

1	demonstrate contemporary and relevant work experience in the physics field.
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Course Objectives

Upon satisfactory completion of the course, students will be able to:

1	develop on-the-job learning objectives that demonstrate new and expanded learning at the work site that directly relate to their educational goal (major).
2	demonstrate successful workplace human dynamics, which may include working as part of a team, following implicit and explicit instructions including company policies and procedures, and practicing work ethics.

- 3 demonstrate appropriate work skills such as communication, problem solving, decision-making, teamwork, self-management, initiative, and/or technical skills that are gained as a result of new and expanded learning at the work site.
- 4 organize and maintain occupational work experience records, including time sheets, a consultation record, and learning objective proposals, evaluation, and documentation.
- 5 appraise and evaluate the occupational work experience situation as it applies to their educational goal (major) in written or verbal format which will take the form of a paper, project, or presentation.

Course Content

Lecture/Course Content

n/a

Laboratory or Activity Content

- 5% Formulate learning objectives
- 15% Manage work experience project through collaboration with faculty adviser and job-site supervisor
- 10% Maintain and update work experience records
- 30% Construct a demonstration of new and expanded learning experiences that occurred at the work site
- 40% Engage in occupational work experience

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Skills demonstrations

Other (specify)

Projects

Participation

Reports/Papers/Journals

Other

Written evaluation and personal consultation with both industry and supervisor and faculty adviser. Evaluation of final forms packet with Learning Objective Contract, Employer Acknowledgement Letter, Learning Objectives Summary and Evaluation, Time Sheet, Consultation Record, Learning Objectives Documentation, Program Evaluation, Problem solving and analysis of results in a job-related environment.

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Distance Education

Laboratory activities

Other (specify)

Specify other method of instruction

Independent study, job shadowing, discussion/seminar, computer-assisted instruction, activity.

Representative Course Assignments

Writing Assignments

write a resume and cover letter.

write succinct learning objectives that include four key components.

write any analytical or evaluative assignment required as part of the particular work experience position.

develop and write a statement of personal philosophy on a given topic.

complete journal assignments that describe thoughts about occupational work experience.

write a term paper.

Critical Thinking Assignments

establish priorities related to time management.

participate in problem solving and analysis of results in a job-related environment.

Outside Assignments**Representative Outside Assignments**

appropriate outside assignments may vary depending on the work experience position.

District General Education**A. Natural Sciences****B. Social and Behavioral Sciences****C. Humanities****D. Language and Rationality****E. Health and Physical Education/Kinesiology****F. Ethnic Studies/Gender Studies****Course is CSU transferable**

Yes

CSU Baccalaureate List effective term:

F1998

CSU GE-Breadth

Area A: English Language Communication and Critical Thinking

Area B: Scientific Inquiry and Quantitative Reasoning

Area C: Arts and Humanities

Area D: Social Sciences

Area E: Lifelong Learning and Self-Development

Area F: Ethnic Studies

CSU Graduation Requirement in U.S. History, Constitution and American Ideals:

IGETC

Area 1: English Communication

Area 2A: Mathematical Concepts & Quantitative Reasoning

Area 3: Arts and Humanities

Area 4: Social and Behavioral Sciences

Area 5: Physical and Biological Sciences

Area 6: Languages Other than English (LOTE)

Textbooks and Lab Manuals

Resource Type

Other Resource Type

Description

Written or online materials relevant to the organization and operation of the workplace or work assignment.

Library Resources

Assignments requiring library resources

Research on appropriate topics related to the area of work using the Library's print and online resources.

Sufficient Library Resources exist

Yes

Distance Education Addendum

Definitions

Distance Education Modalities

Hybrid (1%–50% online)

Hybrid (51%–99% online)

100% online

Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.

Yes

Regular Effective/Substantive Contact

Hybrid (1%–50% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	The faculty advisor may post discussion topics regarding the student project or the internship learning objectives and encourage dialog. These discussion topics may aim to probe and assess student knowledge and progress, or lead the student to explore new concepts and experiment with novel approaches to either problem solving or conquering the learning objectives.
E-mail	The faculty advisor and the student may utilize emails to communicate regularly about a variety of matters including but not limited to upcoming meetings, events, due dates, project details, etc. The student may also email the faculty advisor any documents about the project which will require an action on the part of the faculty advisor.
Face to Face (by student request; cannot be required)	The student may request face-to-face meetings with the advisor to discuss any issues of concern regarding either the learning outcomes of the project, the work environment, or obstacles that are hindering the student's progress. Additionally, the student may request a face-to-face meeting perhaps to demonstrate a skill that the student has learned, or the operation of a device that the student has built, or an art piece that the student has created.
Synchronous Dialog (e.g., online chat)	The faculty advisor may schedule online meeting times with the student to discuss the student's learning objectives, have a dialogue about the student's progress, clarify expectations, or answer questions. The faculty advisor may also meet online with the student and the work site supervisor to discuss the student's contributions to the work place, and any areas of strength or concerns that would help the faculty advisor better guide the student's experience.
Video Conferencing	The faculty advisor and the student may utilize video conferencing for lessons, discussions, collaborations, or Q/A sessions. Video conferencing may also be utilized for student progress and student work assessment and evaluation where the student can illustrate and discuss the outcomes of the learning objectives.

Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	The faculty advisor may post discussion topics regarding the student project or the internship learning objectives and encourage dialog. These discussion topics may aim to probe and assess student knowledge and progress, or lead the student to explore new concepts and experiment with novel approaches to either problem solving or conquering the learning objectives.

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100% online Modality:**Method of Instruction****Document typical activities or assignments for each method of instruction**

Asynchronous Dialog (e.g., discussion board)	The faculty advisor may post discussion topics regarding the student project or the internship learning objectives and encourage dialog. These discussion topics may aim to probe and assess student knowledge and progress, or lead the student to explore new concepts and experiment with novel approaches to either problem solving or conquering the learning objectives.
E-mail	The faculty advisor and the student may utilize emails to communicate regularly about a variety of matters including but not limited to upcoming meetings, events, due dates, project details, etc. The student may also email the faculty advisor any documents about the project which will require an action on the part of the faculty advisor.
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Examinations**Hybrid (1%–50% online) Modality**

On campus

Online

Hybrid (51%–99% online) Modality

On campus

Online

Primary Minimum Qualification

PHYSICS/ASTRONOMY

Review and Approval Dates

Department Chair

MM/DD/YYYY

Dean

MM/DD/YYYY

Technical Review

MM/DD/YYYY

Curriculum Committee

12/07/2021

DTRW-I

12/09/2021

Curriculum Committee

MM/DD/YYYY

Board

01/18/2022

CCCCO

MM/DD/YYYY

DOE/accreditation approval date

MM/DD/YYYY