# **AST M80: INTERNSHIP IN ASTRONOMY**

#### Originator

abarcenas

#### College

Moorpark College

Discipline (CB01A)

AST - Astronomy

Course Number (CB01B)

M80

**Course Title (CB02)** 

Internship in Astronomy

**Banner/Short Title** 

Internship in Astronomy

**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 this 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)

C - Is 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)**

1 - 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

- (0) 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)

I

Maximum Units (CB06)

4

#### **Prerequisites**

**Course Objectives** 

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

learning objective proposals, evaluation, and documentation.

# Upon satisfactory completion of the course, students will be able to: develop on-the-job learning objectives that demonstrate new and expanded learning at the work site that directly relate to their educational goal (major). 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. 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. organize and maintain occupational work experience records, including time sheets, a consultation record, and

4

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**

#### **Laboratory or Activity Content**

5% Formulate learning objectives

30% Construct a demonstration of new and expanded learning experiences that occurred at the worksite

40% Engage in occupational work experience

10% Maintain and update work experience records

15% Manage work experience project through collaboration with faculty adviser and job-site supervisor

#### Methods of Evaluation

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.
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.
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.

Face to Face (by student request; cannot be required)

Synchronous Dialog (e.g., online chat)

Telephone

**Examinations** 

Hybrid (1%-50% online) Modality

On campus Online

Hybrid (51%-99% online) Modality

On campus Online 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.

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.

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.

# **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

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