El Camino College

COURSE OUTLINE OF RECORD - Official

I. GENERAL COURSE INFORMATION

Subject and Number: Astronomy 99
Descriptive Title: Independent Study

Course Disciplines: Physics/Astronomy

Division: Natural Sciences

Catalog Description: This course provides advanced studies in a subject field of Astronomy not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Astronomy projects (54 hours per unit).

Note: Transfer limitations apply.

Conditions of Enrollment: **Enrollment Limitation**

two courses in Astronomy with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Course Length: [X] Full Term [ ] Other (Specify number of weeks):
Hours Lecture: 1.00 - 3.00 hours per week [X] TBA
Hours Laboratory: 0 hours per week [ ] TBA
Course Units: Min: 1.00 Max: 3.00

Grading Method: Letter
Credit Status Associate Degree Credit

Transfer CSU: [X] Effective Date: Prior to July 1992
Transfer UC: [ ] No

General Education:
El Camino College: _____
CSU GE: _____
IGETC: _____

II. OUTCOMES AND OBJECTIVES

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for

each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

1. Student Learning Outcomes are based on the scope of work described in the Independent Study Project Proposal. SLO statements and reports for this course may be obtained in the academic division office.

The above SLOs were the most recent available SLOs at the time of course review. For the most current SLO statements, visit the El Camino College SLO webpage at http://www.elcamino.edu/academics/slo/.

B. Course Student Learning Objectives (The major learning objective for students enrolled in this course are listed below, along with a representative assessment method for each)

1. Work independently in solving advanced Astronomy problems.

   Homework Problems

2. Develop research and critical thinking skills applicable to the field of Astronomy.

   Term or other papers

III. OUTLINE OF SUBJECT MATTER (Topics are detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.)

Lecture or Lab	Approximate Hours	Topic Number	Major Topic
Lecture	0	I	TO BE ARRANGED 18 hours Topics of study in the field of anthropology and the type(s) of project (s) to be included are to be developed through consultation between the student and the instructor (1 unit of credit). OR
Lecture	0	II	TO BE ARRANGED 36 hours Topics of study in the field of anthropology and the type(s) of project (s) to be included are to be developed through consultation between the student and the instructor (2 units of credit). OR
Lecture	0	III	TO BE ARRANGED 54 hours Topics of study in the field of anthropology and the type(s) of project (s) to be included are to be developed through consultation between the student and the instructor (3 units of credit).
Total Lecture Hours	0		
Total Laboratory Hours	0		

Total Hours	0

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. **PRIMARY METHOD OF EVALUATION:**

Skills demonstrations

B. **TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:**

The assignment(s) will be determined by the instructor and student, based on the nature of the Astronomy topic(s) under study.

C. **COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:**

1. The college level critical thinking assignment(s) will be determined by the instructor and student, based on the nature of the Astronomy topic(s) under study.
2. -

D. **OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:**

Other (specify):

Astronomy Project

V. INSTRUCTIONAL METHODS

Other (please specify)

The student and instructor will meet regularly during the semester. Depending on the nature of the project, laboratory work may be required.

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. WORK OUTSIDE OF CLASS

Other (specify)

To be determined by the number of units and the nature of the topic(s)under study.

Estimated Independent Study Hours per Week:

VII. TEXTS AND MATERIALS

A. **UP-TO-DATE REPRESENTATIVE TEXTBOOKS**

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Qualifier Text: Required texts will be determined by the instructor and student.,

B. **ALTERNATIVE TEXTBOOKS**

C. **REQUIRED SUPPLEMENTARY READINGS**
Required supplemental readings will be determined by the instructor and student.

D. **OTHER REQUIRED MATERIALS**
Other required materials will be determined by the instructor and student.

VIII. CONDITIONS OF ENROLLMENT

A. Requisites (Course and Non-Course Prerequisites and Corequisites)

Requisites	Category and Justification

B. Requisite Skills

Requisite Skills

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification

D. Recommended Skills

Recommended Skills

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
two courses in Astronomy with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work	

Course created by Baldwin, Cockrum, Ford, Garrison, and Ween on 04/01/1961.

BOARD APPROVAL DATE:

LAST BOARD APPROVAL DATE: 02/17/2015

Last Reviewed and/or Revised by Thanh-Thuy Bui on 10/28/2014

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