

ASTRONOMY

ASTRO 4 Stars, Galaxies and the Origin of the Universe

Surveys the lives of stars and galaxies, and the relationship of life to the origin of universes, for non-science majors. Recommended Preparation: MATH 154.

Transfer Credit: CSU; UC.

Section	Days	Times	Units	Instructor	Room
65068	MW	09:30AM-10:50AM	3.00	R.Nolthenius	828
65069	M	06:00PM-09:05PM	3.00	R.Nolthenius	828

ASTRO 8A Observational Astronomy

Involves observatory lab projects on stars, planets, the moon, galaxies, and in-class labs and demos on cloudy nights. Prerequisite: ASTRO 3 OR ASTRO 4 OR ASTRO 10 OR ASTRO 11 OR concurrent enrollment; MATH 154.

Transfer Credit: CSU; UC.

Section	Days	Times	Units	Instructor	Room
65070	T	07:30PM-10:35PM	1.00	R.Nolthenius	705

ASTRO 27 Field Astronomy at the Pinnacles

An intensive one weekend field lecture class in general astronomy, using direct visual and telescope observations in explaining planetary geology, solar system, star and galaxy formation, and evolution, and the origin of the universe. Includes car-camping at Pinnacles National Monument. Corequisite: GEOL 27.

Transfer Credit: CSU.

Section	Days	Times	Units	Instructor	Room
65065	W	05:00PM-10:40PM	1.00	R.Nolthenius	706
&	FS	03:30PM-12:05AM		R.Nolthenius	OFFCAM
&	S	05:30PM-06:30PM		R.Nolthenius	705
&	Arr.	Arr.		R.Nolthenius	OFFCAM

Meets Wednesday 4/14. Field trip 4/16-4/17. Final exam Saturday 5/1. + 3 hr 5 min arranged. Car camping and hiking required. Mandatory orientation Tuesday 2/9, 5:30PM-6:30PM, Room 705. Students will be required to pay a \$15 camping fee (covering both ASTRO 27 and GEOL 27) before obtaining an add slip. See GEOL 27 for fee payment, registration, and camping details.

ASTRO 28M Field Astronomy in the High Desert: Two Lunar Grazes

A weekend field lecture/lab course held in the Mojave Desert to observe two bright lunar grazes, study planetary geology, and evening telescopic study of galaxies. Car camping/pooling required.

Transfer Credit: CSU.

Section	Days	Times	Units	Instructor	Room
66517	W	04:30PM-09:30PM	1.00	R.Nolthenius	706
&	F	05:30PM-10:30PM		R.Nolthenius	OFFCAM
&	S	09:00AM-11:30PM		R.Nolthenius	OFFCAM
&	S	05:30PM-06:30PM		R.Nolthenius	705
&	SU	09:00AM-10:50AM		R.Nolthenius	OFFCAM

Meets Wednesday 3/17. Field trip 3/19-3/21. Final exam Saturday 3/27. Car camping, group meals and \$15 camping fee required. Mandatory orientation Tuesday 2/9, 5:30PM-6:30PM, Room 705. Camping fee must be paid to obtain an add slip. *See comment after ASTRO 28N for fee payment, registration, and camping details for all ASTRO 28 classes.

ASTRO 28N Field Astronomy in the California Mountains: Observing an Asteroid Occultation

A weekend field course held in the Sierras focusing on the occultation of a bright star by the asteroid Io, the geology of the inner planets and the Sierras in particular, and the galaxies of the spring sky. Car camping/pooling required.

Transfer Credit: CSU.

Section	Days	Times	Units	Instructor	Room
66518	W	04:30PM-09:30PM	1.00	R.Nolthenius	706
&	F	05:30PM-10:30PM		R.Nolthenius	OFFCAM
&	S	09:00AM-11:30PM		R.Nolthenius	OFFCAM
&	S	05:30PM-06:30PM		R.Nolthenius	705
&	SU	09:00AM-10:50AM		R.Nolthenius	OFFCAM

Meets Wednesday 4/7. Field trip 4/9-4/11. Final exam Saturday 4/24. Car camping, group meals and \$15 camping fee required. Mandatory orientation Tuesday 2/9, 5:30PM-6:30PM, Room 705. Camping fee must be paid to obtain an add slip. *See ASTRO comment below for fee payment, registration, and camping details for all ASTRO 28 classes.

*Payment forms for mandatory camping fees will be distributed at the orientation then payment can be made at the Bookstore. Proof of payment must be presented to instructor to obtain an add slip. Those waiting more than 2 weeks past orientation to process their add slip may lose their space to someone on the wait list. Transportation is the student's responsibility. For more detailed information see instructor's web page at www.cabrillo.edu, "Directory."