

CATALOG INFORMATION

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Dept & Nbr: AST 200 Title: ASTRONOMY
Full Title: Astronomy

Units	Course Hours	Per Week	Nbr of Weeks	Course Hours	Total
Max: 3.0	Lecture	3.0	17	Lecture	51.0
Min: 3.0	Lab	0.0		Lab	0.0
	Contact DHR	0.0		Contact DHR	0.0
	Contact Total	3.0		Contact Total	51.0
	Non-contact DHR	0.0		Non-contact DHR	0.0

Title 5 Category: 01 AA Degree Applic
Grading: GC Credit course for grade or CR/NC
Repeatability: 00 No repeatability allowed or defined
Also listed as:

CATALOG DESCRIPTION:

The universe beginning with the solar system and concluding with stellar objects, galaxies, and the "Big Bang" theory, as well as, special topics which include pulsars, black holes, and life in the universe.

PREREQUISITES:

COREQUISITES:

RECOMMENDED PREPARATION:

No advisories.

LIMITS ON ENROLLMENT:

SCHEDULE OF CLASSES INFORMATION:

Come with me on a journey into the cosmos, examine the planets, nebulae, pulsars, black-holes, and many other exotic regions of our universe. (Grade or CR/NC)
Transfer Credit: CSU; UC.

ARTICULATION and CERTIFICATE INFORMATION

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ASSOCIATE DEGREE:		Effective: FALL	1981	Inactive:
Area:	A	NATURAL SCIENCES		
CSU GE:		Effective: FALL	1981	Inactive:
Transfer area:	B1	PHYSICAL UNIVERSE		
IGETC:		Effective: FALL	1981	Inactive:
Transfer area:	5A	PHYSICAL SCIENCES		

CSU TRANSFER: TRANSFERABLE Effective: FALL 1981 Inactive:

UC TRANSFER: TRANSFERABLE Effective: FALL 1981 Inactive:

CAN:

CERTIFICATE APPLICABLE: N NOT CERTIFICATE/MAJOR APPLICABLE

APPROVAL AND DATES

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Version 02 Submitted by: GERALD DEBANE Date: 10/08/1996
 Department approved: Date:
 Curriculum approved: 10/08/1996 Version approved: 10/08/1996
 Prerequisites approved: Last reviewed: 10/08/1996
 Term effective: FALL 1997 Last taught: SPRING 2008 Inactive:

COURSE CONTENT

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OUTCOME AND OBJECTIVES:

1. Plot the orbits of individual planets and their moons from a center position of the sun.
2. Know the relationships between planet formations, comet composition, solar spectrum analysis and astronomical distance.
3. Understand the historical significance of astronomical events in countries as Peru, New Zealand, Australia and England.

TOPICS AND SCOPE:

1. Definition of Astronomy
2. The Earliest Astronomy: Motives and Artifacts (c 30,000 bp)
3. Origins of the Constellations
4. Early Greek Astronomy
5. Newton's Law of Gravitational Force
6. Origins of Electrodynamical Disturbances
7. Absorption Lines and Bands
8. Earth's Internal Structure with Lithospheres and Plate Tectonics
9. Lunar Rocks and Implications to Earth
10. Survey of the Planets
11. Major Geological Structures of Planets
12. Solar Energy, Nuclear Reactions in Sun and Stars
13. Nearby Stars as a Representative Sample of all Stars
14. Galaxies
15. Relativity
16. Cosmology Models
17. Black Holes
18. Expanding Universe

ASSIGNMENTS:

READING ASSIGNMENTS:

Students will be expected to read textbook assignments, journals as Science, Sky and Telescope and chapters from other assigned books such as but not limited to Brief History of Time by Stephen Hawking.

WRITING ASSIGNMENTS:

1. Students will complete questions assigned at end of chapter which are listed in the course syllabus.

2. Write a summary of each chapter of not less than 500 words.

OUTSIDE ASSIGNMENTS:

Students are expected to spend 2 hours or more out of class for each hour of lecture accomplishing:

1. Schedule textbook reading.
2. Assigned library research/reading.
3. Writing of material from Writing Assignments listed above.

ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING:

The student will be able to make associations between early astronomical events with present day cosmological ones. Student will be able to make correlation between astronomy and cultural phenomena from various parts of the world.

METHOD OF INSTRUCTION:

Lecture presentations will be enhanced by: 1) NASA video tapes;
2) Telescopic observations on some weather-permitting evenings;
3) Guest lecturer when possible.

FOR DISTANCE EDUCATION COURSES:

The content of this course is delivered using some form or forms of distance technology such as television, videotape, audiotape, or the Internet. For telecourses, no less than 11 hours of personal contact between instructor and students shall be included through: group or individual meetings; orientation and review sessions; supplemental seminars or study sessions; field trips; library workshops; or other in-person activities.

For on-line courses, instructor/student contact may take place in a face-to-face setting and/or through e-mail or other electronic means. Students may interact with each other through in-person study groups, electronic message boards, or other means.

METHODS OF EVALUATION:

Students will take several exams which will count for 50% or more of the semester grade. The written work will account for 50% or less of the semester grade.

BASIS FOR GRADING:

The assignment of a grade is based on the level of achievement of the outcomes and objectives of the course outline and is reflected in quantifiable terms in the course syllabus.

REPRESENTATIVE TEXTBOOKS:

Astronomy: From Earth to Universe, Pasachoff, 6th Ed., Brooks/Cole

REASON FOR REVISION

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RESOURCES REQUIRED

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MISCELLANEOUS

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Advisory generate desc:	N	NO
Area department:	AST	ASTRONOMY
Audit flag:	N	NOT AUDITABLE
Basic skills:	X	NOT BASIC SKILLS
Classification:	A	Liberal Arts and Sciences
Cost level:	01	
Disciplines:		ASTRONOMY
Division:	02	MERIDITH RANDALL
Faculty service areas:		ASTRONOMY
Fee:	\$0.00	
In-service:	X	NOT IN-SERVICE
Level below transfer:	X	NOT APPLICABLE
Matric-requiring:	X	Exempt from assessment
Maximum class size:	0	
Maximum wait list:	0	
Method of instruction:	02	LECTURE
	63	TV/VIDEO 1-WAY; PASSIVE
	99	OTHER/UNSPECIFIED METHOD OF INSTRUCTION
Non-credit category:	X	NOT APPLICABLE, CREDIT COURSE
Open entry/exit:	N	Not open entry/exit
Pacs activity:	1901	PHYSICAL SCIENCE GENERAL
Pacs program project:	0000	
Preq/coreq generate desc:	N	NO
Preq/coreq provisional:	N	NO
Preq/coreq reg check:	N	NO PREREQUISITE RULES EXIST
Repeat group id:		
Requires instructor sig:	N	INSTRUCTOR'S SIGNATURE NOT REQUIRED
SAM classification:	E	Non-occupational
Selected/special topic:	N	NOT A SELECTED TOPIC COURSE
Special class:	X	NOT A SPECIAL COURSE
TOP code:	1911.00	ASTRONOMY
Workload:	0.0000	