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 CRN# 70422
 Section: 001
 Time: **MWF** 12:00 – 1:00 PM
 Office Hours: **MW** 11:00 – 11:50 AM
 In-class Exam #1: Wednesday **September 22, 2010**
 In-class Exam #2: Wednesday **November 10, 2010**
 Final Exam: **Friday** **December 17, 2010** **11:00 – 1:00 PM**

Course Description:

Lec-3

(Designed for students who have not completed ASTR 1, 17, 18, or 20 with a final grade of C or higher.)

A non-math course stressing the observational universe as seen through the use of telescopes, space probes, theoretical and computer modeling, and other aids. The great ideas of ancient and modern astronomy. Fundamental ideas in the physical sciences appropriate to understanding the structure of the universe and the origin of life. **CSU**

*(The word **non-math** should be interpreted as meaning concept-based with minimal use of high-school math to clarify certain concepts)*

Textbooks:

Required: Seeds & Backman. *Perspectives In Astronomy*. Custom Edition. Thomson

Tentative Schedule:

Week #	Content	Comments	Chapter
1	Introduction & Celestial Motion		1, 2
2	Early & Renaissance History of Astronomy	Hw#1	3
3	Motion, Matter & Energy	Hw#2	4
4	Light, Telescopes, & Spectroscopy	Monday Holiday, Hw#3	4
5	The Sun	Hw#4	5
6	The Family of Stars	In-class Exam #1	6
7	The Family of Stars		
8	Properties of Stars	Hw#5	6, 7

9	Stellar Evolution	Monday Holiday	7, 8
10	Stellar Evolution	Hw#6	8
11	The Milky Way	Hw#7	9
12	Galaxies I	Hw#8	10
13	Galaxies II	In-class Exam #2	10
14	Cosmology I	Hw#9	11
15	Cosmology II		11
16	Cosmology III	Hw#10	11
17	The Formation of the Solar System	Project Due	12
18	FINAL EXAM WEEK		

Instruction Methodology:

I will use the following methods for instruction: (a) group discussions & in-class activities, (b) multimedia presentations, (c) quizzes and exams, and (d) lectures.

Group discussion format will vary according to the material at hand. You will need to form a group with fewer than four members. You cannot be in the same group for the entire semester. We will have at least one group discussion every two weeks. At the end of each group discussion, each group is expected to turn in a consensus summary.

Multimedia presentations will consist of movies, computer simulations, etc. You are expected to take notes during presentations. After each presentation I will encourage you to ask questions, and I will summarize the main points of the lesson.

During the semester, I will use quizzes and exams to evaluate your progress and mastery of the subject material.

Lectures will concentrate on explaining major concepts presented in each chapter from the textbook. You are expected to read the text **before class**. There are a lot of new definitions and terminology introduced in each chapter, and I will not be able to go over each of these in class. You are expected to **learn and remember** these definitions and terms. If you have a problem with this material, you should come by during my office hours. However, there are a few definitions that I will discuss in detail.

If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible.

My role is to guide you through the course and help you to learn the material. However, you are the one who needs to do the work. I will welcome your feedback.

Attendance:

You are allowed **four** absences during the semester. If you miss **more than six** lectures (or total of six hours of instruction) **and** you do not inform me, I may elect to **withdraw** your enrollment if the absences occur before midterm exam; afterward, this will result in a grade adjustment. The attendance policy is effective in the 3rd week of instruction (**August 30, 2010**). Furthermore, if you arrive late or leave the lecture early by more than 10 minutes (**ALE**), I will count as **one hour of absence**. In addition, if you are **consistently late** or leave the lecture early by more than 5 minutes, I may elect to **withdraw** your enrollment. Otherwise, it is **your responsibility** to drop the course if you decide the course is not suitable for you, and the last day for student/instructor initiated withdrawal is **November 18, 2010**.

Evaluation:

The course grades will be weighted as follows:

Project (1)	10%	100 points
Assignments (~10)	40%	400 points
In-class exams (2)	30%	300 points
<u>Final Exam (1)</u>	<u>20%</u>	<u>200 points</u>
Total	100%	1000 points

There are a total of four assignments for this course. (See the Tentative Schedule section below for distribution dates and due dates, 100 points per assignment.)

There are ten **assignments**, each of which carries 50 points. **It is possible to earn a total of 500 points**. The format of in-class exams may include the following: (a). fill-ins, (b). short questions, (c). label diagrams, (d) matching, etc. In-class exams will test subject materials that are discussed in class and homework assignments.

If you are officially absent from class on the day of the exam (see Attendance Policy above), you are not allowed to make up the exam. An exception will be granted only if you can provide proof of extenuating circumstances (see CCSF Catalog).

If you miss the exam due to unforeseen circumstances (illness, jury duty, etc.), you **must** contact me and schedule a make-up exam within a week. The last day for Student-Instructor Initiated Withdrawal is **November 18, 2010**. You **must** take the final exam as scheduled.

The final individual course grade assignment will be based on a normalized distribution of cumulative raw scores of all students in ASTR 14. The assignment of grades is as follows:

A	90% or higher
B	75 - 89%
C	60 - 74%
D	40 - 59%
F	below 40%

If you have any further questions or concerns, please feel free to see me.

The Honor System & Extra Credit Policy:

We function on the honor system. This means that you are on your honor to hand in work that is your own. This does not mean that we discourage studying and learning with fellow students -- quite the contrary! What we do frown upon is such things as copying your friend's homework just before class and just plain cheating.

Extra credit activities are offered for your enrichment. Participation in these activities is strictly voluntary. You can earn a maximum of 50 extra credit points (roughly 5% of your final course grade).and **ONLY IF YOU TURNED IN ALL ASSIGNMENTS ON TIME**. You can turn in all your extra credits at the **FINAL Exam**. If you would like to earn extra credit, there are at least three different ways.

Public Lecture in Astronomy: You must write a summary report after attending a public lecture. The report must include the date, the name of the speaker(s), location, and name of the event. The following is a list of recommended public lecture series in astronomy:

- Distinguished Lecturer Series at Chabot Space & Science Center. Call (510) 336-7373 for information.
- Silicon Valley Astronomy Lecture Series at Foothill College. Call (650) 949-7888 for information.
- Dean Lecture Series at Morrison Planetarium: Call (415) 750-7141 for information.
- CCSF Astronomy Department Lecture Series

In addition, the *San Francisco Amateur Astronomers* maintain additional listings of public lectures in astronomy throughout the Bay Area. For information, visit their website at www.sfaa-astronomy.org. [10 points per report]

Science Museums: You must show proof that you visited any science museums, centers, planetaria, or observatories. You can find a list at <http://www.ccsf.edu/astro/links.html> [5 points per visit, maximum 15 points]

Special Project: You can earn **50** extra credit points by doing a special project. I can assign you a specific project, or you can propose your own. A student mentor will be available to assist you to complete the project [**50 points**]

Resources for the Course:

There are a few good magazines that you can get from newsstands, bookstores, and libraries that will be good supplemental readings for this course, including *Astronomy*, *Sky & Telescope*, *Discover*, *Science News*, *Scientific American*. The Rosenberg Library at the Phelan campus subscribes all of the above magazines

You can also find a wealth of information about astronomy on the Internet, through the world wide web. The Academic Computer Laboratory (ACL) on the second floor of Rosenberg provides access to the Internet, and to academic computer software.If you have never used the web before, it is time to learn about this wonderful resource.

The Astronomy Department also provides mentoring and tutorial services at the Planetarium (Science Hall 406) during the semester. Detail information can be found at the **First Light webpage**, www.ccsf.edu/flight/.