

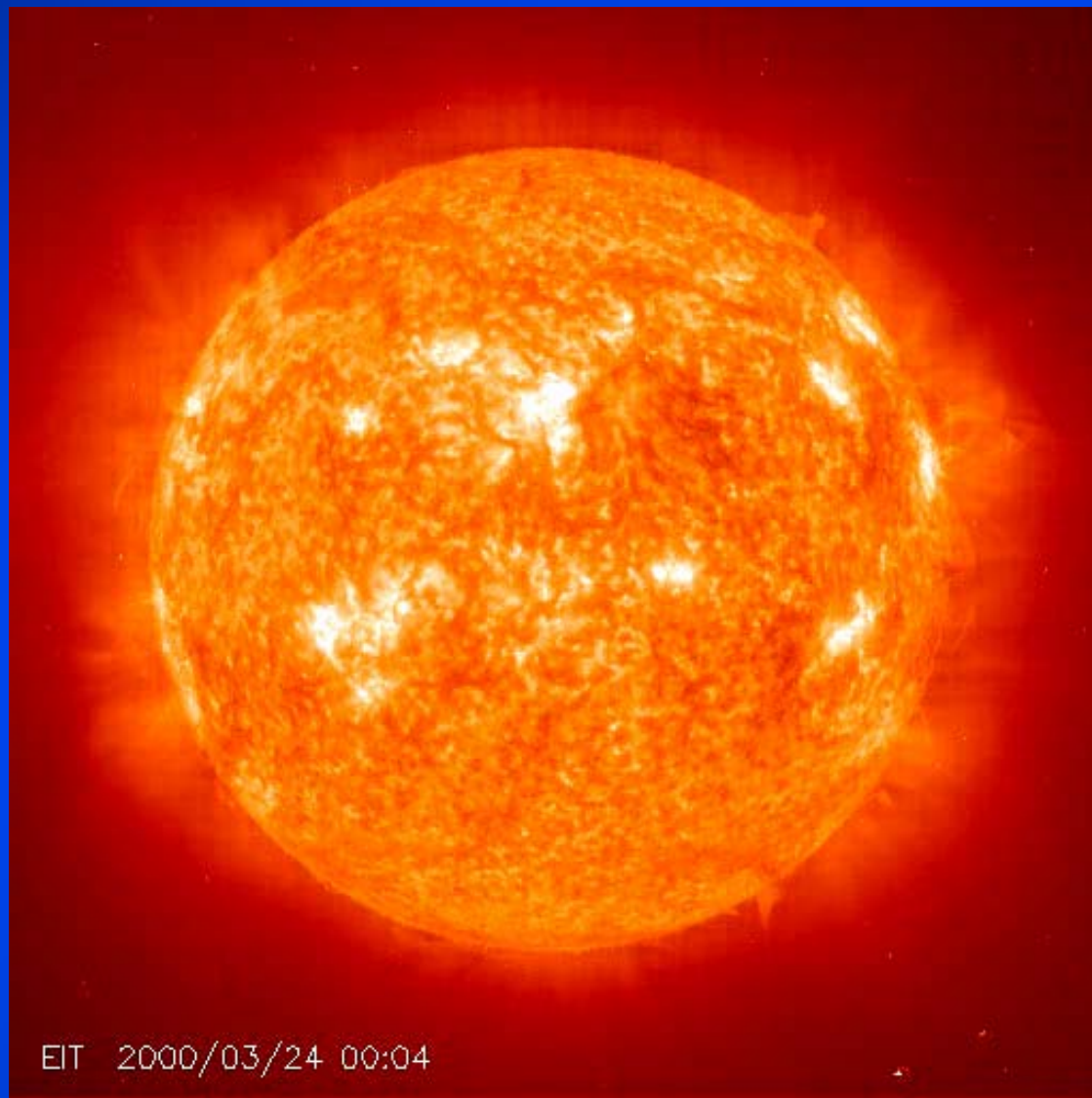
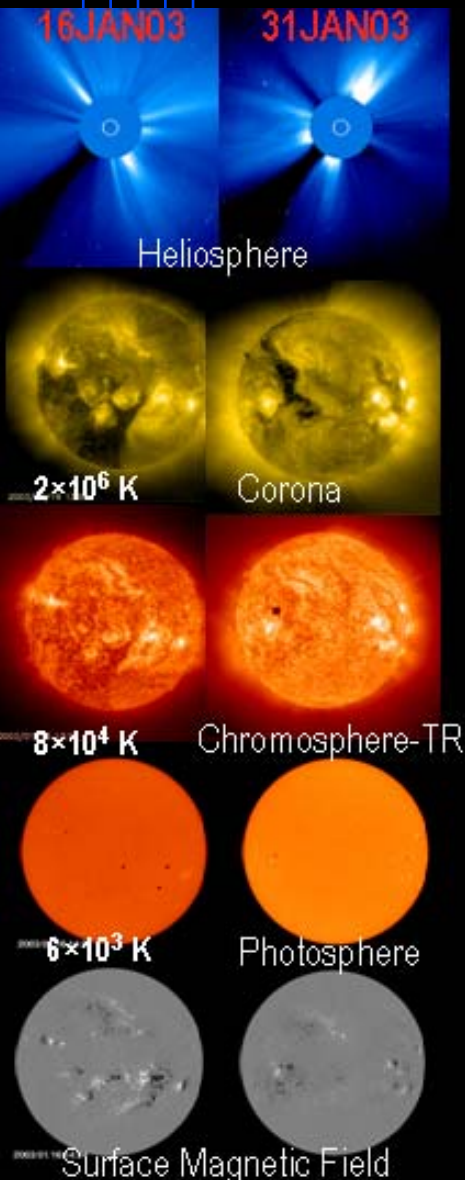
Lect. 01 Aug. 27, 2006

Introduction to Modern Astronomy I: Solar System

Dr. Jie Zhang

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My astronomy work



Syllabus

- Objectives
 - Get to know our universe, across the space and the time
 - Learn scientific methods
- The first course in a two-semester series
 - ASTR111, and ASRT112 (Lab)
 - ASTR113, and ASTR114 (Lab)
- Pre-requisite
 - None
 - No college level math, but algebra and geometry

Syllabus

- Text Book
 - By R. A. Freedman and W. J. Kaufmann III,
Universe, 8th Edition,
W. H. Freeman and Company, 2007
- Four sections, 28 chapters, 760 pages
 - Section 1, chap. 1-6, Introducing Astronomy
 - Section 2, chap. 7-15, Planets and Moons
 - Section 3, chap. 16-22, Stars and Stellar Evolution
 - Section 4, chap. 23-28, Galaxies and Cosmology

Syllabus

This class

- Ch1. Astronomy and the Universe
- Ch2. Knowing the Heavens
- Ch3. Eclipses
- Ch4. Gravtation
- Ch5. Nature of Light
- Ch6. Telescopes
- Ch7. Solar System
- Ch8. Origin of Solar System
- Ch9. Earth
- Ch10. Moon
- Ch11. Mercury, Venus and Mars
- Ch12. Jupiter and Saturn
- Ch13. Satellites
- Ch14. Uranus, Neptune, Pluto..
- Ch15. Comets, Asteroids
- Ch16. Our Sun
- Ch28. Extraterrestrial life

ASTR113

- Ch17. Stars
- Ch18. Birth of Stars
- Ch19. Stellar Evolution
- Ch20. Deaths of Stars
- Ch21. Neutron Stars
- Ch22. Black Holes
- Ch23. Our Galaxy
- Ch24. Galaxies
- Ch25. Quasars
- Ch26. Cosmology
- Ch27. Early Universe

Syllabus

- Homework & Projects:
 - None. Except for the lab (if taken ASTR112)
- Examinations
 - **Three** 1-hour-long In-Class Exams
 - **One** Final Exam
 - All multiple choice questions
 - Closed book and closed notes
 - Bring ID, Scantron (**Bring your own**) and pencils
 - **Light green scantron**

Syllabus

- **Grading**
 - Final exam: **40%**
 - Three IN-CLASS Exam: **60%**
 - **Only two counted in the final grade, each 30%**
 - **one lowest score is dropped**
- **No Make-up Exams**
 - **no excuse**
 - **Do not be late in the exam**
- **No Extra Credit**
- **Grades will be curved based on overall performance**

Syllabus

- Studying Tips
 1. Reading the book before the class
 2. Coming to the class

- Encouraging class participation
 - 3-5 discussion questions are given in each class
 - Will appear in the in-class exams

Honor Code

"George Mason University shares in the tradition of an honor system that has existed in Virginia since 1842. The Honor Code is an integral part of university life. On the application for admission, students sign a statement agreeing to conform to and uphold the Honor Code. Therefore, students are responsible for understanding the provisions of the code. In the spirit of the code, a student's word is a declaration of good faith acceptable as truth in all academic matters. Therefore, cheating and attempted cheating, plagiarism, lying, and stealing of academic work and related materials constitute Honor Code violations. To maintain an academic community according to these standards, students and faculty must report all alleged violations of the Honor Code to the Honor Committee. Any student who has knowledge of, but does not report, an Honor Code violation may be accused of lying under the Honor Code."

Syllabus

- Class website
(http://solar.gmu.edu/teaching/ASTR111_2007/index.html)
 - PPT presentations of lectures will be posted online.
 - Check the website for important announcement, e.g., exam date, grades and others

Contact Information

- Office Hour: Monday 3:00 – 4:00 PM
- Other Times by appointment
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