ASTRONOMY, Fall 2011

Instructor: Satoshi Hinata, Allison 208a (hinata@physics.auburn.edu)

Textbook: Discivering the Universe, 9e, on the web at http://courses.bfwpub.com/dtu9e.php

Lecture Room: 236 Parker Hall, Time: 9:00AM-9:50AM

Clickers

We use iclicker2 to monitor your attendance and participation in the class activities. You are responsible for the smooth operation of clicker, including the maintenance of the battery. You must not bring clickers that belong to others to the class. You should not ask others to use your clicker in the class.

Objectives of the class

To learn the astronomical phenomena.

To understand the basic principles which govern the astronomical phenomena.

To investigate an astronomical topic and present findings effectively.

| Chapters | Subjects |
|----------|------------------------|
| 2 | Gravitation |
| 3 | Light and Telescope |
| 4 | Atoms and Spectra |
| 10 | Sun |
| 11-14 | Stars |
| 15-18 | Galaxies and Cosmology |

| Distribution of Points | |
|--------------------------------------|--------|
| Project | 20pts |
| Test on Projects | 5pts |
| Activities in class, web assignments | 20pts |
| Hour Tests (8/31,9/26,10/19,11/7) | 30pts |
| Labs | 25pts |
| Total | 100pts |

| A | ≥90 |
|---|-----|
| В | ≥80 |
| С | ≥65 |
| D | ≥55 |
| F | ≤55 |
| | |

Requirements (if you miss any requirement, you automatically earn F)

- 1. Attendance in the labs (You must make up missed labs by one week before the last class day. 2 missed labs, you have F.)
- 2. Project

Attendance policy

If you miss the class for a reason permitted by the University, write one double spaced page report per missed class on the topic discussed in the class when you missed. Submit the report with the excuse note within one week of the missed class.

Project

- ▶ Topics: Anything related to astronomy.
- ▶ Format: A 15-minute PowerPoint presentation (Page 1 : Title and the participants in an alphabetical order; Last page: two important questions in multiple choice format)
 - ▶Use diagrams and pictures well, limit the use of sentences in the slides, try to expose ideas & logic rather than array of facts.
 - ► Grading of the project

Project sign-up and submission on time (you must have a title to sign-up): 4 points

Content of the project: 15 points (appropriate amount of materials, coherent contents, ideas and reasoning rather than array of facts, quality of questions, excessive amount of sentences will be penalized)

Presentation: 6 points (talk to the audience without reading notes, graded as a group, so practice before the presentation.)

List of possible topics for your project (I would like it better, if you do on other topic, which has some relation to astronomy) Inner planets (Mercury, Venus & Mars).

Outer planets

Earth's inner structure.

Earth's magnetosphere.

Global warming.

Comets & Asteroid.

Astrobiology (Life in an extreme environment, outside of the earth),

How astronomical instrument works.

Ancient astronomy.

New object discovered in the last 10 years.

History of cosmological ideas

Important Dates

| October 3 | Register for the project: | |
|---------------|---|--|
| November 4 | Submission of the project by email to hinata@physics.auburn.edu | |
| November 9-30 | Presentations | |
| November 30 | Project quiz | |

If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation (such as an H1N1 flu outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials.