

## NS 206 - What is There in the Universe: Inside the Milky Way?

### COURSE CONTENT:

The structures of the Milky Way starting from the solar system: Birth of the modern science Galileo - Copernican revolution. Earth and the planets. Stars and star clusters. How does a star shine - electromagnetic spectrum, blackbody radiation, spectral lines, Doppler shift. Stellar structure and evolution - HR diagram. End points of stellar evolution: stellar explosions- supernova -white dwarfs, neutron stars and black holes. Satellite observatories and space research.

### TEXT BOOK:

E. Chaisson & S. McMillan, ASTRONOMY TODAY , 8<sup>th</sup> Edition

**Access code:** From HOMER Bookstore through the link below:

<https://www.homerbooks.com/urun/astronomy-today-modified-mastering-with-etext>

### GRADING:

**MT: 40 %**

**FINAL: 60 %** (includes all the subjects covered in the course)

**Questionnaires: 10 %** (There will be 8 -12 (or more) questionnaires which are given at random times in some of the lectures. In these questionnaires, you are asked simple questions and/or the points that you did not understand in the current subject, which provide a feed-back for the instructor to clarify these points in the following lectures. This additional 10% could be considered as a bonus in your total grade. There won't be make up for the questionnaires that you fail to attend, even if you have reasonable excuses. To compensate for this, we do not count 3 of the questionnaires. (For instance, if 12 questionnaires are given in a particular semester, those who attend 9 (or more) get full 10 %).

Your total grade is converted into letter grade as follows:

85 - 100: A                      55 – 59: C

80 – 84: A-                      50 – 54: C-

<u>75 – 79: B+</u>	<u>45 – 49: D+</u>
<u>70 – 74: B</u>	<u>40 – 44: D</u>
<u>65 – 69: B-</u>	<u>&lt; 40 : F</u>
<u>60 – 64: C+</u>	

### **Make up Policy:**

If you do not attend a particular exam because of health problems, you should send an e-mail to course instructor at your earliest convenience.

There will be a **single make up** for all the exams. The make up exam (could be an oral exam for on-line lectures) **covers all the subjects** of the course and is typically harder than the regular exams.

### **Academic Integrity**

In the exams each student will be evaluated only for her/his own work. Students are encouraged to work and study together. But what you put down on exam papers should be your own work in your own words. If your friends want to use of your paper in exams, assignments or quizzes, to allow this is not helping them. Such behavior, as all forms of cheating, is unfair and disrespectful, to yourself, to all the students in the class, to your teachers and teaching assistants, and to the university. A student involved in cheating has misused the trust extended to him or her. Violations of academic integrity will result in zero grades, both for those who cheat and those who allow and help them. These students may also face disciplinary action. In all such situations we will ask you to have a face-to-face meeting with your faculty member. We have mutual trust and respect for each other as individuals sharing in a collaborative learning experience. This is very valuable for all of us, and having to lose this trust and respect would be very regrettable.