

Edmonds Community College
Winter 2007
Astronomy 100 (5 credit hours)

Instructor: Linda M. Khandro

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Office: WDY 101 Hours: Tuesday & Thursday, 5:30 – 6:00 pm

Text: Universe: The Solar System, by Freedman and Kauffman

Lab Materials: TBD

Lecture: Tuesday/Thursday (#0914) 6 – 7:50 pm; Room Woodway Hall (WDY) 101

Labs: Tuesday (#0915) 8 – 9:50 pm; WDY 202; Thursday (# 0916) 8 – 9:50 pm; WDY 202

Overview of this course:

Astronomy 100 (solar system) at Edmonds Community College is the first in a two-part series of introductory study that also includes Astronomy 110 (beyond the solar system). This series is also an introduction to the methods of science - careful observation, development of models, and the resolution of conflicting theories. Astronomy 100 covers the Earth in space, the Moon, the planets, light, the Sun, and the search for life outside planet Earth. It is designed to be rigorous enough to provide background for subsequent study, while not overwhelming to a non-science major student. You will be responsible for reading and assimilating all the material in the textbook as well as some materials not covered in the text. You will also be responsible for timely submission of 10 lab/homework assignments, which will familiarize you with the Earth in space, the orbital properties of planets, the geometry of an eclipse, tides, light and spectra, and the Sun, among others. There will be four chapter tests, spaced approximately every three weeks. The fourth test comprises a non-cumulative final exam.

Field Trip: One optional field trip to the University of Washington's Planetarium will be planned early in the quarter, with details available soon. It will take place on a Friday evening, and will substitute for one Tuesday of regular class time. Extra credit will be awarded for a write up of your experience. If you cannot attend, a library reading can be assigned instead, for the same amount of extra credit (but it's not nearly as much fun!)

On/Off Campus Night Sky Viewing: We will have at least one evening on-campus sky observation session (attendance required, there may be no advance warning) with naked eye, binoculars, and telescopes as soon as possible, weather depending! In addition, you are encouraged to find a local "star party" to attend at least one evening in the quarter, and extra credit will be awarded for a write up of your experience. Go to the Seattle Astronomical Society's website: www.seattleastro.org for many amateur astronomy viewing options in our area.

Classroom Climate & Special Needs: Please be ON TIME and prepared to stay for the whole class. Late arrivals and early departures disrupt everyone. Please see me if special conditions are warranted. You are required to turn off audible rings on all electronic devices during class; answering silent or text calls must be done outside class or during the break. See your Student Handbook for further information. If you require an accommodation for a disability or a special need, please contact Services for Students with Disabilities at MLT 159, 425-640-1320, ssdmail@edcc.edu. See your Student Handbook for further information.

Cheating: Cheating is utterly unacceptable. It consists of but is not limited to, using someone else's work in place of your own. The minimum penalty for cheating is a 0 on the activity with no make up. The maximum penalty is removal from the class and a 0.0 final grade.

Student Responsibilities and Evaluation: total possible = 600 points

4 chapter tests, approximately one every 3 weeks: 400

Lab Assignments (10 @ 20 points): 200

Grades: The followed ECC approved equivalency grading system will be used for this course

%	Point Grade	Letter Grade	%	Point Grade	Letter Grade
100 - 96	4.0 - 3.9	A	79 - 77	2.4 - 2.2	C+
95 - 90	3.8 - 3.5	A-	76 - 74	2.1 - 1.9	C
89 - 87	3.4 - 3.2	B+	73 - 70	1.8 - 1.5	C-

86 – 84	3.1 – 2.9	B	69 – 67	1.4 – 1.2	D+
83 – 80	2.8 – 2.5	B-	66 – 64	1.1 – 0.9	D
			63 – 60	0.8 – 0.7	D-
			<60	0.0	E

Make Up Tests: Chapter make up tests are ONLY available IF you have a valid reason for missing a test. And you MUST inform me either ahead of time, on the day of, or on the day after a test, in order to make it up.

Note: Good attendance and class participation can improve your final grade!

Class Outline (subject to minor changes as the course proceeds)

Week 1: Jan 2-5

Ch 1 Astronomy and the Universe
Ch 2 Knowing the Heavens

Week 2: Jan 8 - 12

Ch 3 Eclipses and the Motion of the Moon
Ch 4 Gravitation and the Waltz of the Planets

Week 3: Jan 15 - 19

Ch 4 Gravitation and the Waltz of the Planets, cont'd
Test # 1: Ch: 1, 2, 3, 4

Week 4: Jan 22 - 26

Ch 5 The Nature of Light

Week 5: Jan 29 – Feb 2

Ch 7 Comparative Planetology I: Our Solar System
Ch 8 Comparative Planetology II: The Origin of our Solar System
Ch 9 The Living Earth

Week 6: Feb 5 – 9

Test # 2: Ch 5, 7, 8, 9
Ch 10 Our Barren Moon
Ch 11 Sun-Scorched Mercury

Week 7: Feb 12 - 16

Ch 12: Cloud-Covered Venus
Ch 13: Red Planet Mars

Week 8: Feb 19 - 23

Test # 3: Ch 10, 11, 12, 13
Ch 14 Jupiter and Saturn: Lords of the Planets
Ch 15 Jupiter and Saturn's Satellites of Fire and Ice

Week 9: Feb 26 – Mar 2

Ch 16 The Outer Worlds
Ch 17 Vagabonds of the Solar System

Week 10: Mar 5 - 9

Ch 18: Our Star, the Sun

Week 11: Mar 12 – 16

Final Exam: Tuesday, Mar 13, 6 – 7:50 pm
Test # 4 Ch 14, 15, 16, 17, 18