

**PHYS 215 - Introduction To Astronomy - Second Semester 2007-2008 (072)**

**Course Schedule And Description And Grading Policy**

Revised: April 7, 2008

**1) COURSE DESCRIPTION (UNDERGRADUATE BULLETIN 2006-2009)**

An Elementary Introduction to Astronomy. Topics Covered Include: Astronomy and Astrology; Light and Telescopes; Time and Calendar; Celestial Mechanics; Solar System; Stellar Measurements, Stellar Motions, Magnitudes, Spectra, Distances, Parallaxes, and Formation; Early and Modern History of Astronomy; Contribution of Arab and Muslim Scientists to Astronomy. ( **Prerequisite : Phys 102** )

**2) TEXTBOOK**

Astronomy : From The Earth To The Universe By Jay M. Pasachoff, Sixth Edition, Saunders College Publishing 2002.

**3) SUPPLEMENTARY (OPTIONAL) READINGS**

- a) Frontiers of Astronomy, Morrison and Wolff, Saunders (Brooks/Cole) 1994.
- b) Exploration of The Universe, Abell, Morrison, Cidney and Wolff, Saunders 1993.
- c) Astronomy: The Solar System and Beyond 5<sup>th</sup> Ed, Seeds, Thomson Brooks/Cole 2007.
- c) Foundations of Astronomy 10<sup>th</sup> Ed, Seeds, Thomson Brooks/Cole 2008.
- d) Explorations: An Introduction to Astronomy, Army and Schneider, Mc Graw-Hill 2008.
- e) Astronomy From Stonehenge to Quasars, Friedlander, Prentice-Hall 1985.
- f) Sky Guide : A Field Guide For Amateur Astronomy, Chartrand and Wimmer, Golden (St. Martin) 2001.
- g) Laboratory Exercises In Astronomy, Holzinger and Seeds, Macmillan 1976.
- h) 365 Starry Nights, Raymo, Prentice-Hall 1982.
- i) Sky and Telescope Magazine (Monthly).
- j) Astronomy Magazine (Monthly).
- k) Al-Oloom Al-Bahatah Fi Alhadharah Alarabiah Waleslamiah, Ali A. Al-Dafaa, Al-Risalah Est, Lebanon, 1981. (Arabic)
- l) Al-Falal Eind Al-Arab (Astronomy and Arabs), Abdurraheem Badir, Al-Masri Est., Lebanon, 1985. (Arabic)
- m) Elm Al-Falak (Arab and Muslim Contributions to Astronomy), Yahya Shami, Dar Al-Fikr Al-Arabi Pub., Lebanon, 1997. (Arabic)
- n) Al-Gegrafiah Al-Falakyiah (Astronomical Geography), Ameen Tarboosh, Dar Al-Fikr Est., Syria, 1997. (Arabic)

**4) INSTRUCTOR (Website: [http://faculty.kfupm.edu.sa/PHYS/alshukri/PHYS215/Phys215\\_Main\\_page2a.htm](http://faculty.kfupm.edu.sa/PHYS/alshukri/PHYS215/Phys215_Main_page2a.htm))**

Dr. Ali Mohammad Al-Shukri, ( Office : Location : **6-111**, Phone : 2255, Office Hours: **U.M.W 7:30 – 9:00** )

**5) GRADING POLICY**

**(a) COURSE GRADE**

The Course Grade Will be Evaluated as Follows:

Class Work and Observing Sessions.	14%
First Major Exam .	24%
Second Major Exam.	24%
Final Exam (Comprehensive).	38%

**(b) CLASS AND OBSERVING SESSION WORK**

The class and observing sessions work shall comprise of quizzes, homework, projects, presentations, attendance, reports, papers, ... etc. and any other assignments the instructor wishes to give.

**(c) MAJOR AND FINAL EXAMINATIONS**

(Major And Final Exams Are Of Problem-Solving, Multiple Choice, T/F, And/Or Discussion Type Exams)

MAJOR AND FINAL EXAMINATIONS ARE SCHEDULED AS FOLLOWS:

First Major Exam	31	March	2008	(Chapters 01 To 05 + Hand-Outs + Class Discussions)
Second Major Exam	19	May	2008	(Chapters 06 To 17 + Hand-Outs + Class Discussions)
Final Exams	10	June	2008	(Chapters 01 To 23 + Hand-Outs + Class Discussions)

**6) ATTENDANCE**

Attendance will be evaluated according to current university regulations. Official excuse for an absence should be presented within a week of resuming the class. A DN grade will be issued if the total number of unexcused absences exceeds 9 absences.

**(Attendance is compulsory in lectures and observing sessions. You should be in class on time. One point will be taken from your grade for each absence. DN grade will be given for more than 9 absences)**

**PHYS 215** (Introduction To Astronomy) - **TERM: 072** (Second Semester 2007 -2008)

Week	Date	Topic	Chapter	Homework
1.	16 Feb 18 20	Course Organization and Policy) The Universe : An Overview The Universe : An Overview	-- 01 01	03, 04, 05
<b><u>Tuesday 19 February - Last Day for Late Registration and adding courses</u></b>				
2.	23 Feb 25 27	The Universe : An Overview The Early History of Astronomy The Early History of Astronomy	01 02 02	02, 07, 12
<b><u>Tuesday 26 February - Last Day for Dropping Courses Without Permanent Record</u></b>				
3.	01 March 03 05	The Early History of Astronomy, Muslim Astronomers The Origin of Modern Astronomy The Origin of Modern Astronomy	02 03 03	03, 04, 05, 08
4.	08 March 10 12	The Origin of Modern Astronomy Light and Telescopes Light and Telescopes	03 04 04	01, 03, 05, 09
5.	15 March 17 19	Light and Telescopes Observatories Observatories	04 05 05	03, 05, 12, 13
6.	22 March 24 26	The Sky and The Calendar The Sky and The Calendar The Sky and The Calendar	06 06 06	01, 03, 05, 08
7.	29 March 31 02 April	The Sky and The Calendar The Structure and Origin of the Solar System The Structure and Origin of the Solar System	06 07 07	03, 06, 15, 16
<b><u>Monday, 31 March First Major Exam (Chapters 01 To 04 + Class Discussions + Hand-Outs)</u></b>				
<b><u>Tuesday, 1 April - Last Day for Dropping Courses with Grade Of 'W' Thru Internet</u></b>				
8.	05 April 07 09	The Structure and Origin of the Solar System The Earth The Earth	07 08 08	01, 03, 08
<b><u>Wednesday, 09 April Last day of Classes before Midterm Break</u></b>				
9.	19 April 21 23	The Moon The Moon Mercury	09 09 10	01, 03, 11 02, 03, 07
10.	26 April 28 30	Venus Mars Jupiter and Saturn	11 12 13 / 14	01,03,10 03, 04, 13 01, 05 / 01, 02
<b><u>Tuesday, 29 April - Last Day for Withdrawal from ALL Courses with Grade of 'W' Thru Internet</u></b>				
11.	03 May 05 07	Uranus and Neptune Pluto and general information about the Solar System Extra Solar Planets	15 / 16 17+ 18	01, 07 / 01, 05 04, 07 04, 06, 07
12.	10 May 12 14	Comets Asteroids Life in The Universe	19 20 21	01, 04, 07 02, 04, 06 07, 08, 09
13.	17 May 19 21	The Sun (Photosphere, Chromosphere The Sun (Corona, Solar Eclipses) The Sun (Sunspots, Flares, Prominences)	22 22 23	03, 09 01, 09, 10
<b><u>Monday, 19 May Second Major Exam (Chapters 05 To 14 + Class Discussions + Hand-Outs)</u></b>				
14.	24 May 26 28	The Sun (Solar Wind, Solar Constant) Colors of Stars Planck's Law and Black Bodies	23 24 24	01, 04, 06
<b><u>Tuesday, 27 May - Last Day For Withdrawal From ALL Courses With Grade of 'WP/WF' , Last Day for Major Exams</u></b>				
15.	31 May 02 June 04	Stellar Spectral Lines Stellar Magnitudes and Distances HR Diagram, Doppler Effect, and Stellar Motions	24 25 25	02, 03, 05,06,21,26,30 <b>(Last Day Of Classes)</b>
16.	07 June	Final Exams Begin	<b>(Final Exams period: 07 – 18 June 2008)</b>	