

PHYS 215 - Introduction To Astronomy - First Semester 2009-2010 (091)

Course Schedule And Description And Grading Policy

Revised: December 15, 2009

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, Sidney and Wolff, Saunders 1993.
- c) Astronomy: The Solar System and Beyond 5th Ed, Seeds, Thomson Brooks/Cole 2007.
- c) Foundations of Astronomy 10th Ed, Seeds, Thomson Brooks/Cole 2008.
- d) Explorations: An Introduction to Astronomy, Arny 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-Bahtah Fi Alhadharah Alarabiah Waleslamiah, Ali A. Al-Dafaa, Al-Risalah Est, Lebanon, 1981. (Arabic)
- l) Al-Falal Eind Al-Arab (Astronomy and Arabs), Abdulraheem 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-Falakiah (Astronomical Geography), Ameen Tarboosh, Dar Al-Fikr Est., Syria, 1997. (Arabic)

4) **INSTRUCTOR**

Dr. Ali Mohammad Al-Shukri, (Office : Location : 6-226, Phone : 3573, Office Hours: S.U.M.T.W 8:00 am– 8:50 am)

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	08	Dec	2009	(Chapters 01 To 05 + Hand-Outs + Class Discussions)
Second Major Exam	10	Jan	2010	(Chapters 06 To 17 + Hand-Outs + Class Discussions)
Final Exams	31	Jan	2010	(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: 091** (First Semester 2009 - 2010)

Week	Date	Topic	Chapter	Homework
1.	03Oct 05 07	Course Organization and Policy) The Universe : An Overview The Universe : An Overview	First Day of Classes 01 01	03, 04, 05
<u>Tuesday 06 October - Last Day for Late Registration and adding courses</u>				
2.	10 Oct 12 14	The Universe : An Overview The Early History of Astronomy The Early History of Astronomy	01 02 02	02, 07, 12
<u>Wednesday 14 October - Last Day for Dropping Courses Without Permanent Record</u>				
3.	17 Oct 19 21	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.	24 Oct 26 28	The Origin of Modern Astronomy Light and Telescopes Light and Telescopes	03 04 04	01, 03, 05, 09
5.	31 Oct 02 Nov 04	Light and Telescopes Observatories Observatories	04 05 05	03, 05, 12, 13
6.	07 Nov 09 11	The Sky and The Calendar The Sky and The Calendar The Sky and The Calendar	06 06 06	01, 03, 05, 08
<u>Tuesday, 11 November - Last Day for Dropping Courses with Grade Of 'W' Thru Internet</u>				
7.	14 Nov 16 18	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
<u>Wednesday, 18 November - Last day of Classes before Eid Al-Adhha Vacation</u>				
8.	05 Dec 07 09	The Structure and Origin of the Solar System The Earth The Earth	07 08 08	01, 03, 08
<u>Saturday, 05 December First Day of Classes After Eid Al-Adhha Vacation</u>				
<u>Monday, 08 December First Major Exam (Chapters 01 To 04 + Class Discussions + Hand-Outs)</u>				
9.	12 Dec 14 16	The Moon The Moon Mercury	09 09 10	01, 03, 11 02, 03, 07
10.	19 Dec 21 23	Venus Mars Jupiter and Saturn	11 12 13 / 14	01,03,10 03, 04, 13 01, 05 / 01, 02
<u>Wednesday, 23 December - Last Day for Withdrawal from ALL Courses with Grade of 'W' Thru the Registrar Office</u>				
11.	26 Dec 28 30	Uranus and Neptune Pluto's Status & General information about the Solar System Extra Solar Planets	15 / 16 17+ 18	01, 07 / 01, 05 04, 07 04, 06, 07
12.	02 Jan 04 06	Comets Asteroids Life in The Universe	19 20 21	01, 04, 07 02, 04, 06 07, 08, 09
13.	09 Jan 11 13	Review The Sun (Photosphere, Chromosphere The Sun (Corona, Solar Eclipses)	22 22	03, 09
<u>Sunday, 10 January Second Major Exam (Chapters 05 To 14 + Class Discussions + Hand-Outs)</u>				
14.	16 Jan 18 20	The Sun (Sunspots, Flares, Prominences) The Sun (Solar Wind, Solar Constant) Colors of Stars & Planck's Law and Black Bodies	23 23 24	01, 09, 10 01, 04, 06
<u>Wednesday, 20 January - Last Day For Withdrawal From All Courses With Grade of 'WP/WF' , Last Day for Major Exams</u>				
15.	23 Jan 25 27	Stellar Spectral Lines Stellar Magnitudes and Distances HR Diagram, Doppler Effect, and Stellar Motions	24 25 25	02, 03, 05,06,21,26,30 (Last Day Of Classes)
16.	31 Jan	Final Exam (Sunday 31 Jan 2010 @ 7:00 pm)	(Final Exams period: 30 Jan – 09 Feb 2010)	