

SYLLABUS--PHYSICS 162--ELEMENTARY ASTRONOMY--Spring 2017

Satisfies general education requirement (Origins and Influences Pathway)

David Hedin, LaTourette Hall FW224, hedin@niu.edu

nicadd.niu.edu/~hedin/162/162.html

Office Hours: Tuesday and Thursday 10:30-11:00

Observatory: Gregory Alley Faraday 215A gregory.alley@niu.edu

<http://www.physics.niu.edu/physics/observatory/index.shtml>

Discovering the Essential Universe by Comins editions 4 or 5 or 6. Or  
The Cosmic Perspective Fundamentals by Bennett, Donahue, Scheider and  
Voit. BOOK NOT REQUIRED. Assigned Problems are on course web page

Book Chapter

Section	Cosmic Perspective Ed 1	Essential Universe Ed 6
1 View of Universe and the Sky	1+2	1
2 Gravitation and Planet Motion	2+3	2
3 Light and Telescopes	pages 43,80,125,130,133, 135,148,180,196	3
4 The Sun	8	9
5 Characteristics of Stars	8	10
6 The Lives of Stars	9	11
7 The Death of Stars	10	12
8 The Galaxies	11	13
9 Cosmology	12+13+14	14
10 Formation of the Solar System	4+7	4+5
11 Astrobiology	14	15

Test 1. Sections 1,2,3,4	Thursday February 23	
Test 2. Sections 5,6,7	Thursday April 6	all exams:
Test 3. Sections 8,9,10,11	Tuesday May 2	50 minutes
Test 4. final all sections	Tuesday May 9	10:00

Grading: Each test will count 100 points and the lowest test score will be dropped. There will be no makeups allowed after the day of the test; a missed test will be considered as the lowest score and dropped. You can choose to skip the final and just count the first three tests. Sample tests are on the web page. The assigned problems are due the day of the test (1/2 credit if late). They contribute 24 points to your grade (8 points per exam). The problems will be reviewed at the end of the class immediately preceding each exam day. There will be 3 in-class worksheets (1/2 credit if done out of class) each counting 10 points. You can also do extra credit. An extra credit paper should be from 1-2 typed pages. I will not accept papers e-mailed to me. The deadline is before the final. Possible extra credit items are a report on a movie shown in class or a physics colloquium and count 5 points maximum/report. Sign in for each. You can also receive 2 extra credit points each just for watching the movies

shown in class or attending the colloquiums. This is in addition to the 5 points for the paper. I hope to arrange a class to be held in the evening at the observatory and students will receive 10 points for attending that class.

Class Curve	260+	A	The letter grades posted on Blackboard are
	225-259	B	meaningless. If you take 4 exams, Blackboard
	180-224	C	does not drop the lowest exam and so the
	150-179	D	Blackboard sum of points is incorrect

There will not be any "minus" grades in this class. I will award "plus" grades (like B+) as appropriate and will determine how to do so at the end of the term.

The learning goals of this course are an introduction to the components making up our Universe.

The learning outcome of this course is the student being able to explain some of the components of the Universe, and include a) analyze issues that interconnect human life and the natural world and b) collaborate with others to achieve specific goals.

NIU is committed to providing an accessible educational environment and any student requiring an academic accommodation due to a disability should let their faculty member know as soon as possible, and are encouraged to contact the DRC at 815-753-1303 or [drc@niu.edu](mailto:drc@niu.edu).

Non-Discriminatory Language: This class will promote non-discriminatory language practices. Cell Phones/Computers in Classroom: Cell phones and computers can not be used in class during exam periods, or in a way which is disruptive to the class. Class Visitation Policy: Due to liability concerns, only NIU students are allowed to attend at classes at NIU. Guests, including family members and NIU students not registered for the course, will not be permitted to attend class except with prior arrangement with the instructor. Academic Misconduct: For a detailed description of the university's definition of academic misconduct, and the process by which it is adjudicated, please refer to the Student Code of Conduct. Sanctions (consequences) for committing academic misconduct include but are not limited to, failure of the assignment, failure of the course, and suspension or expulsion from Northern Illinois University. Cheating and plagiarism of one's own or another's work will not be tolerated. Academic integrity and civility in the classroom are expected of every member of the NIU community. Please review the Undergraduate Catalog for more information on this topic. Religious Observances: NIU does not observe religious holidays. It is the university's policy, however, to reasonably accommodate the religious observances of individual students in regards to class attendance, scheduling examinations, and work requirements. Religious observance includes all aspects of religious observance and practice as well as belief. Absence from classes or examinations for religious observance does not relieve students from responsibility for any part of the course work required during the period of absence. To request accommodation, students

who expect to miss classes, examinations, or other assignments as a consequence of their religious observance shall provide instructors with reasonable notice of the date or dates they will be absent.