NIU PHY 162 – Elementary Astronomy, Spring 2015

Introduction to astronomical science covering the origin, evolution, constitution, motion, and certain other characteristics of stars, planets, satellites and other space objects such as comets, asteroids, galaxies, black holes etc., together with an overview of current topics in cosmology.

Lectures: TuTh 11:00 am -12:15 pm (Section 1), TuTh 3:30 pm - 4:45 pm (Section 2); Room: FW 200

Instructor: Prof. Dhiman Chakraborty dchakrab@niu.edu, dhiman.chakraborty@gmail.com

Instructor Office hours: TuTh 1:00 pm - 2:00 pm, FW 220 (or by appointment)

Observatory: Every second Thursday night when clear, Davis Hall (TBC)

Text: Discovering The Universe (10th Ed.), by Comins & Kaufmann

Grading

• 12 homework assignments - 10 points each
• 4 exams - 40 points each
  o Exam 1 - Tools of Astronomy – covers Chapters 1-4
  o Exam 2 - Planets - covers Chapters 5-9
  o Exam 3 - Stars - covers Chapters 10-13
  o Exam 4 – The Universe - covers Chapters 14-18
• 6 pop quizzes – 10 points each
• 3 papers (3 to 4 pages, double spaced, submitted electronically) - 20 points each, due the day of each of the first three tests

  1. Report on a factual news story published in the past 2 years about a telescope or satellite and what it aims to measure
  2. Report on a fictional account of a planet or moon in a movie or tv show and how it compares with real planets
  3. Report on any web page discussing any type of astronomical object or phenomenon other than stars, planets, or their satellites and related phenomena

• Extra credit – paper (like above) 20 points, due on the last day of class
  o Report on a visit to the observatory.

Grade curve:

• A : 320 or more out of 400
• B : 280 to 319
• C : 240 to 279
• D : 200 to 239
• F : less than 200