Franklin & Marshall College - Physics and Astronomy Department
Astronomy 171: Introduction to Astrophysics
F. Crawford
Spring 2012 Weekly Class Plan

Weekly Class Plan

During the course of the semester, we will try to keep to the weekly schedule outlined below. This will ensure that we have lots of interactive sessions and that you are able to work collaboratively. During some weeks we will deviate from this schedule. In those cases I will discuss this with you in advance.

The portion of the week where I will be presenting new material is an opportunity for you to ask questions and resolve any misunderstandings about the reading. Be sure to read all of the material independently and carefully, and come to class with questions. Reading the material in advance of class will better equip you to understand it and participate in class discussion.

Since the ability to solve quantitative problems and to work collaboratively are important skills to have in this subject, we will be doing group work (problem solving sessions) in class. You will work in groups of no more than 3, and each group will work each week to develop a "skeleton solution" for a given (somewhat complicated) problem. One person from the group will present that skeleton solution (briefly) to the rest of the class each week. Everybody will then use those skeleton solutions to complete the full assignment on their own. Note that a skeleton solution is not a complete solution to the problem, but rather is just a framework and approach that can be used to get started on the right path to solve the problem. Each group (and the person giving the presentation) will be judged each week on the quality of the skeleton solution and presentation.

The proposed weekly schedule for the class is presented below.

- **In Monday's class:**
  - The assignment from the previous week is due in class.
  - Hand out the new assignment.
  - Lecture presentation and discussion about this week's material (be sure to ask questions about complicated and unclear issues!), review any physics needed to understand material.
  - Introduce and discuss any extra (related) topics not described directly in text.
- *After Monday's class, read up on this week's assigned reading from the book carefully and thoroughly, review your class notes, and identify confusing issues.*
- **In Wednesday's class:**
  - Discuss any questions or issues from the reading and from Monday's class (ask questions!)
  - Discuss anything of relevance for tonight's lab.
  - Group work problem solving workshop. Work on the skeleton solution for your group's problem (instructor is there for guidance if needed). Work on other homework if time.
  - Do evening lab that night.
- *Before Friday's class, each group prepares their skeleton solution for Friday class presentations.*
- **In Friday's class:**
  - One member of each group presents their group's skeleton solution (plus any questions or discussion). Each presentation is 5-10 minutes.
  - If any time left, discuss any other assignment issues or questions and any last minute questions on this week's lecture or reading.
  - Assign the reading for next week.
- *Over the weekend, finish the assignment (all problems), use the astronomy clinic on Sunday night if needed, and do an initial read of next week's material.*