ASTRONOMY 2110  
Introduction to Astrophysics I.

Monday, Wednesday, Friday – 11:00 a.m. – Chemistry 305 – Schedule Numbers 10382 and 10383
Craig Sarazin

Prerequisites: MATH 1210 or 1310, and PHYS 1610 or 1425, or instructor permission

Instructor: Craig Sarazin; offices: 201 & 238 Astronomy Building; phone: 924-4903; office hours: MWF 1:30-2:30 or by appointment or any other time you can catch me; E-mail: sarazin@virginia.edu. Please feel free to E-mail me with any course questions. There is a WWW webpage for this class, which is http://www.astro.virginia.edu/class/sarazin/astr2110/

Teaching Assistant: Andrew Burkhardt, office: 267 Astronomy Building; phone: 924-0686; office hours: Friday 2 – 3 p.m. or by appointment; E-mail: amb3au@virginia.edu

Discussion Session: Friday, 3–4 p.m., G004 Clark Hall. Discussion of lectures and homework, led by Teaching Assistant

Text: Ryden and Peterson, Foundations of Astrophysics, ISBN-13: 978-0321595584, Addison-Wesley. This text will be supplemented with material on recent developments in astronomy. This material will appear on homework problems and tests, so class attendance is highly recommended.

Homework: Passed out on each Monday, due the following Monday. Late problem sets will have grades reduced by 50% and must be turned in by December 8. The homeworks are an important part of the class, as they reinforce the ideas discussed in class and help to develop problem solving skills.

Tests: There will be two in-class tests during the semester, and a final exam. The format of the tests will be a combination of problems (similar to those on the homework), short answer questions, and multiple choice. All tests must be taken at the scheduled time unless you submit a written excuse from your parent or doctor explaining the necessity of your absence. The excuse must be submitted within 10 days after the test. Late tests taken without excuse count for 1/2 of the normal credit based on the score.

First In-Class Test: Monday, October 6, in class (tentative date)
Second In-Class Test: Monday, November 17, in class (tentative date)
Final Exam: Friday, December 12, 9:00 a.m. to noon, Chemistry 305

Grading:

<table>
<thead>
<tr>
<th>Percent of Grade</th>
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<tbody>
<tr>
<td>Homework</td>
<td>25% total</td>
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<tr>
<td>Two In-Class Tests</td>
<td>20% each</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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Course Outline

I. Introduction [Preface]

II. Coordinates, Time, and Telescopes [Chapts. 1 & 6]

III. Motion and Gravity [Chapts. 2 & 3]

IV. Electromagnetism and Light [Chapt. 5]


VI. Binary Stars [Chapt. 13, pp. 322-335]

VII. The Sun [Chapt. 7]

VIII. Atomic Physics and Stellar Spectra [Chapts. 5 & 14]

IX. Stellar Structure [Chapt. 15]

X. Stellar Evolution [Chapt. 17, pp. 398-408]

XI. The Death of Stars [Chapt. 18]

XII. The Interstellar Medium and Star Formation [Chapt. 16, Sect. 17.1]

XIII. Our Galaxy, the Milky Way [Chapt. 19]