Astronomy 2: Planetary Astronomy  
Instructor: Greg Mace – Email: mace_gregory@smc.edu

Class Times: Monday-Thursday, 8:00-10:05AM, Drescher Hall 205
Office Hours: 7:30-8:00AM & 10:05-10:30AM on class days, Drescher Hall _________

Assessment:
Letter grades will be assigned as: A >90%, B=80-90%, C=70-80%, D=60-70%, F< 60%
10% - In-Class Participation
15% - Homework Assignments – Due each Tuesday and Thursday at start of class
15% - Reading Quizzes – Each Monday and Wednesday at the start of class
30% - Mid-term Exam – January 17th
30% - Final Exam – February 7th
+5% - Extra Credit

Course Goals:
Our class will not be a conventional lecture. It will rely heavily on pair/group discussion, interactive learning, and a series of mini-lectures. My responsibility is to find ways to help you learn astronomy, and your responsibility is to actively engage in your own learning experience. My goals for this course are for you to: have a deep enough understanding of the concepts that you can teach family and friends about the night sky; use reasoning to identify astronomy misconceptions; and understand our solar system’s characteristics.

Classroom Rules:
- Calculators, cell phones, and laptops are not to be used in class.
- Students will need to provide three (3) #882 Scantron test forms for exams.
- I will respond to emails as quickly as possible and will check for new emails each evening.
- College policies on cheating and withdrawal deadlines will be strictly enforced.
- Writing assignments should be 12pt Times New Roman, double-spaced with one-inch margins. Text should be in your own words and I will search Google to check for plagiarized work.

Participation:
In each class you will be expected to have a piece of paper that will be used to record your thoughts and answers to questions posed to you as an individual, or as the member of a group. At the end of each lecture I will collect these papers to grade your participation on pass/fail basis – meaningful participation will get a passing grade, even if your answers are wrong.

Homework Assignments:
Homework for this course is designed to build upon in-class discussion and textbook reading. There will be ~10 assignments this session. They should each take you about 30 minutes to complete and will be due at the start of class. Late submissions will only get 50% of the maximum allowed grade, but can be submitted up to the final exam.

Reading Quizzes:
This course is condensed into just a few weeks and we have a lot to cover. You will need to read ~10 pages of your textbook each day. We will have ~10 reading quizzes and each will cover ~1 chapter of the textbook. See the reading schedule below.
Mid-Term Exam:
The mid-term exam will be given January 17 during the normal class meeting. You are expected to bring your own Scantron sheets (1) for the exam. The first hour of the class will be a review session and the second hour will be the exam. All reading, homework and lectures prior to this date will be on the exam.

Final Exam:
The final exam will be given on the last day of class and will take the full 2 hours. The exam will be cumulative, but focus mostly on the second half of the course. You are expected to bring your own Scantron sheets (2) for the exam. The first part of the exam will be done individually, and the second part will be done in pairs. Your grade on this exam will be the average of these two scores.

Extra Credit:
All extra credit is due by the start of the final exam. You can earn up to 5% extra credit using any combination of the items below.
1) Research the mythology of a constellation or planet name. Write a 2-page summary, and give a 1-page interpretation of the modern equivalent to this myth. List your references. Verify your choice with me before you start so there are not duplicates. (1% for writing, 1% if you share it with the class.)
2) Write a 5-page essay on an upcoming or current space mission. 1-page on what it is, 2-pages about why it matters to you and how it relates to what we have learned in class, and 2-pages of figures and references. (1% for writing, 1% if you share it with the class.)
3) Visit a museum, planetarium, or exhibit involving astronomy and write a 2-page description of what you experienced, relating it to class discussion. Include a photograph of yourself at the location for complete credit. (2%)
4) Teach a friend or family member what you have learned in class and get them to write you a 1-page summary of the topic. You both must sign the summary. (1%)
5) Be creative – come up with a project and talk to me about it! (1-2%)

Absences:
If you miss a class, you will forfeit ~2% of the class grade from participation and homework/quizzes. If you know that you will miss a class, then make plans to complete extra credit assignments.

January 21st is Martin Luther King Jr. Day and we will not be meeting for class.

Reading Schedule:

<table>
<thead>
<tr>
<th>Quiz Date</th>
<th>Chapters</th>
<th>Pages</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/07/2013</td>
<td>1,2</td>
<td>1-31</td>
<td>Intro, The Sky, Seasons</td>
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<tr>
<td>1/09/2013</td>
<td>4,5</td>
<td>51-99</td>
<td>History and Science of Astronomy</td>
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<tr>
<td>1/14/2013</td>
<td>6</td>
<td>100-125</td>
<td>Light and Telescopes</td>
</tr>
<tr>
<td>1/16/2013</td>
<td>3</td>
<td>32-50</td>
<td>The Phases on the Moon</td>
</tr>
<tr>
<td>1/23/2013</td>
<td>8,19</td>
<td>142-167/403-430</td>
<td>The Sun and Formation</td>
</tr>
<tr>
<td>1/28/2013</td>
<td>20,21</td>
<td>431-462</td>
<td>The Earth &amp; Moon</td>
</tr>
<tr>
<td>1/30/2013</td>
<td>22</td>
<td>463-501</td>
<td>Mercury, Venus &amp; Mars</td>
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<tr>
<td>2/04/2013</td>
<td>23,24</td>
<td>502-551</td>
<td>Jupiter, Saturn, Uranus &amp; Neptune</td>
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<tr>
<td>2/06/2013</td>
<td>25</td>
<td>552-588</td>
<td>The Outer Solar System &amp; Beyond</td>
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