COURSE ORGANIZATION

GEOLOGICAL SCIENCES 0050 – Mars, Moon, and the Earth

Semester 1 2015-2016, MWF 2:00-2:50 PM, MacMillan Hall 115
Professor James Head
Department of Earth, Environmental and Planetary Sciences, Lincoln Field Building 104
(x3-2526)
James_Head@Brown.edu
Office hours: Wed 3-5 PM or by appointment
Course Website: http://www.planetary.brown.edu/planetary/geo5/

I. Teaching Assistants:

Your TAs, Erica Jawin, James Cassanelli and David Weiss, will be responsible for helping you with any questions about the reading, exercises and exams, as well as about grades on your exercises and exams. I am also always available for discussions during my office hours (Wed 3-5 PM or by appointment).

Graduate Teaching Assistants
Erica Jawin
Erica_Jawin@brown.edu
114 Lincoln Field Building
Office Hours: TBD

James Cassanelli
James_Cassanelli@brown.edu
114 Lincoln Field Building
Office Hours: TBD

David Weiss
David_Weiss@brown.edu
114 Lincoln Field Building
Office Hours: TBD

Your Undergraduate Teaching Assistant, Chris Monschauer, will also be available for consultations and advice.

Chris Monschauer
Christopher_John_Monschauer@brown.edu
109 Lincoln Field Building
Office Hours: TBD
II. General Course Information:

A. Textbooks: The two textbooks are available free online! See the GEOL 0050 web site for details.


B. Academic Dishonesty: This is not tolerated in any form whatsoever. Please see web page for link to Academic Code (http://www.brown.edu/gradschool/academics-research/rules-regulations/academic-code). Suspected violators will be reported immediately and directly to the Dean.

III. Schedule of Tests and Exercises:

The following list indicates the titles of the exercises that we will do this semester and the approximate times they will be distributed, generally by e-mail. The exercise and any necessary supplemental material will also be posted on the class web site (http://www.planetary.brown.edu/planetary/geo5/). These exercises generally count ten points each and together make up 40% of the final grade. They are designed to supplement the text and lectures. Each will have a due date indicated on the exercise. One exercise, *Exercise 3: Analysis of Lunar Samples Returned by the Apollo Astronauts*, requires attendance at specially arranged afternoon or evening sessions. The times and locations of these activities will be announced the week preceding the exercise.

All exercises should be returned on or before the day that they are due, either at class or in your TA’s mailbox (first floor, Lincoln Field Building) no later than 5 PM on the due date. 10% will be deducted from the grade of exercises submitted late. No exercises will be accepted after the exercise has been graded and returned. If you are not in class when an exercise is returned, you may pick it up in the boxes in the front hall of Lincoln Field Building. Needless to say a conscientious effort to complete these exercises in a timely fashion will help you in keeping up with the course material and will provide a solid grade base.

**EXERCISE DISTRIBUTION and DUE DATES**

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Distribution Date</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise 1 – Google Earth Lab</td>
<td>E-mailed out September 18th</td>
<td>Due 5 PM September 25th</td>
</tr>
<tr>
<td>Exercise 2 – Google Moon Lab</td>
<td>E-mailed out September 25th</td>
<td>Due 5 PM October 2nd</td>
</tr>
<tr>
<td>Exercise 3 – Moon Rocks Lab</td>
<td>E-mailed out October 2nd</td>
<td>Due 5 PM October 9th</td>
</tr>
</tbody>
</table>

**Hour Exam: Monday, October 19th**
Exercise 4 – Google Mars Lab
E-mailed out October 23rd
Due 5 PM October 30th

Exercise 5 – Venus Geology
E-mailed out November 6th
Due 5 PM November 13th

Exercise 6 – Asteroids/Comets
E-mailed out November 20th
Due 5 PM December 4th

Final Exam (Take Home) Distributed: Friday, December 4th
Due no later than 5pm, Wednesday, December 16th

IV. Other Available Information

Portions of the class material will be available on the web. Most material will also be distributed on paper.

Planetary Geology and GEOL 0050 Home Page: For general information, consult the Brown University Planetary Geoscience home page at http://www.planetary.brown.edu. You can access the GEOL 0050 home page at http://www.planetary.brown.edu/planetary/geo5. In addition to course information, our favorite NASA and other data sources are there.

V. Other Related and Optional Activities

DVDs on the History and Findings of Solar System Exploration: We have available in the Planetary Data Center (second floor of Lincoln Field Building) a series of DVDs on various missions (Pioneer, Viking, Apollo, Voyager, Magellan, Space Shuttle, Mars Exploration Rovers, Cassini, MESSENGER, etc.) and their results. The Data Center is open Monday-Friday and arrangements can be made to view these in the Data Center during the day throughout the semester. Contact Peter Neivert, Data Center Coordinator (x3-3243 or Peter_Neivert@Brown.edu). You can also download most of this information from online websites.

Guest Lecturers: From time to time the Department of Geological Sciences and the Planetary Geosciences Group will have guests who will be giving talks on topics of interest in planetary geosciences. In addition, in Geo 50, Apollo 15 Commander David R. Scott will discuss his trip to the Hadley-Apennine region of the Moon during the semester, in September, and Astronaut John Grunsfeld, NASA Associate Administrator for Space Science will give a lecture on NASA Science Plans on Thursday, October 22nd at 4pm, in MM 115. For some of these I will distribute Extra Credit Exercises, which can be completed to bolster your Exercise Grade.

Visualization: The WALL and The Yurt (Immersive Virtual Reality): We will visit Antarctica, Mars and the Moon in immersive virtual reality. This will be schedule early in the semester.