

## GLY 4930/6932: Topics in Planetary Science – Spring 2024 – 3 credit hours

Mon. periods 4 (10:40 – 11:30am EST) and Fri. period 3 - 4 (9:35 – 11:30am EST)

Williamson Hall, Room 218

**Instructor:** Dr. Stephen Elardo

Williamson Hall - 229

[selardo@ufl.edu](mailto:selardo@ufl.edu)

352-392-2634

**Office hours:**

Mondays 1 -2pm, Fridays 2 -3pm, or by appointment

**Course Website:** <http://elearning.ufl.edu>

**Course Materials:** Primary literature papers, will be provided.

### Course Objectives

- 1) Students will explore the primary literature regarding planetary crusts by learning to effectively analyze peer-reviewed journal articles, exploring classic literature, synthesizing primary data to understand the state of the art in the field, and applying that knowledge to interpreting current models.
- 2) Students will learn about a variety of techniques for the collection of data and study of planetary crusts.
- 3) Students will synthesize data from the literature to develop conceptual models for how different planetary crusts formed.

<b>Grading Scheme:</b>	A = 93.0-100%	A- = 90.0-92.9%	
	B+ = 87.0-89.9%	B = 83.0-86.9%	B- = 80.0-82.9%
	C+ = 77.0-79.9%	C = 73.0-76.9%	C- = 70.0-72.9%
	D+ = 67.0-69.9%	D = 63.0-66.9%	D- = 60.0-62.9%
	E = below 60%		

	POINTS POSSIBLE
<b>ATTENDANCE AND PARTICIPATION</b>	30%
<b>LEADING PAPER DISCUSSIONS</b>	30%
<b>WEEKLY PAPER SUMMARIES:</b>	40%

**Schedule:** The tentative schedule for discussion topics and reading assignments is below, and will also be posted separately on Canvas.

**Weekly Paper Summaries:** Students will be required to submit a written summary of the assigned papers to be read for that by the start of class on Friday of that week. The summary of the papers should be roughly a page of text (e.g., ~750 words). If summaries appear to be less than ~3/4 of a page, half credit will be given. Missing summaries get no credit. As part of the summary, students should identify the three main questions they have about the content of the papers or about the topics the papers discuss, and they should bring those questions to class to aid in a robust discussion. Students are not required to submit a summary on the week they serve as Discussion Leader.

**Leading Paper Discussions:** Each student will act as the presenter/discussion leader for one Friday class discussion. The Discussion Leader should prepare a small number of slides (e.g., 5 – 10 slides) to help introduce the topic and highlight important/interesting questions. The Discussion Leader should also endeavor to keep the class discussion moving and productive.

**Late Work Policy:** Work turned in late will be subject to a grade reduction of 20% per day.

**Makeup Policy:** If you have a preexisting conflict with one of the scheduled exams, an alternative meeting time must be arranged with Dr. Elardo made at least one week prior to the exam. In case of sudden illness or family emergency, please notify the instructor as soon as possible (within no more than 1 week). Appropriate documentation may be required. No make-ups will be permitted for other, unexcused absences.

**Email:** ALL email communications MUST be sent from (and will be sent to) your Gatorlink accounts, or be sent through the Canvas email tool. I will respond to email within 24 hours Monday through Friday. **Before sending Dr. Elardo a question via email please check the syllabus and class website for the answer to your question.**

### **Course Evaluation**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://gatorevals.aa.ufl.edu/>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://gatorevals.aa.ufl.edu/>.

### **Students Requiring Accommodations**

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### **University Honesty Policy**

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

**University Policy on Accommodating Students with Disabilities:** Students requesting accommodation for disabilities must first register with the Dean of Students Office (is <http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**University Policy on Academic Misconduct:** Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

**Netiquette: Communication Courtesy:** All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. [Describe what is expected and what will occur as a result of improper behavior – <http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

### **Campus Resources:**

#### **Health and Wellness**

U Matter, We Care: If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or 352-392-1575 so that a team member can reach out to the student.

**Counseling and Wellness Center:** <http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

**Sexual Assault Recovery Services (SARS)**

Student Health Care Center, 392-1161.

**Software Use**

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

**Student Privacy**

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

## Schedule of Topics

Week	Day	Date	Topic	Discussion Leader
1	M	Jan 8	Intro/Course Discussion	-
	F	Jan 12	Primer on Planetary Crusts/Geology Review	Steve
2	M	Jan 15	Holiday – No Class	-
	F	Jan 19	Crustal Compositions and Planetary Differentiation	Steve
3	M	Jan 22	Tectonic Styles and Planetary Uniformitarianism	-
	F	Jan 26	Early Earth	
4	M	Jan 29	Hadean Crust and Zircons	-
	F	Feb 2	Hadean Crust and Zircons	
5	M	Feb 5	Emergence of Continents	-
	F	Feb 9	Emergence of Continents	
6	M	Feb 12	Transition to TTGs	-
	F	Feb 16	Ancient Lunar Crust	
7	M	Feb 19	The LMO – Classic Papers	-
	F	Feb 23	Dr. Elardo Traveling – No Class	
8	M	Feb 26	Lunar Crustal Asymmetry	-
	F	Mar 1	Lunar Crustal Asymmetry	
9	M	Mar 4	Lunar Crustal Chronology	-
	F	Mar 8	Lunar Crustal Chronology	
10	M	Mar 11	Spring Break – No Class	-
	F	Mar 15	Spring Break – No Class	-
11	M	Mar 18	Mars Ancient Crust	-
	F	Mar 22	Mars Ancient Crust	
12	M	Mar 25	Mars Crustal Asymmetry	-
	F	Mar 29	Mars Crustal Asymmetry	
13	M	Apr 1	Venus' Crust	-
	F	Apr 5	Venus' Crust	
14	M	Apr 8	Mercury's Crust	-
	F	Apr 12	Mercury's Crust	
15	M	Apr 15	Asteroidal Crusts - Vesta	-
	F	Apr 19	Asteroidal Crusts - Vesta	
16	M	Apr 22	Asteroidal Crusts – Andesities	-
	F	Apr 26	Reading Day – No Class	

---Above schedule is tentative and subject to change---