



IMPERIAL VALLEY COLLEGE

Note to Instructor: Replace the placeholder text beneath the headings with the appropriate information for your course. Please note that all sections, with the exception of "Other Course Information," are required elements.

Basic Course Information

Semester:	Fall 2025	Instructor Name:	Kevin Marty
Course Title & #:	Historical Geology; Geol 140	Email:	kevin.marty@imperial.edu
CRN #:	11229	Webpage (optional):	
Classroom:	2733	Office #:	2776
Class Dates:	8/11-12/7	Office Hours:	M-Th:8:30am-9:30am room 2733
Class Days:	M,W	Office Phone #:	760-355-5761
Class Times:	11:20-2:30pm	Emergency Contact:	
Units:	4	Class Format/Modality:	face to face

Course Description

Study of the changes of Earth and life through geologic time. Evolution of the continents, ocean basins and major life forms throughout Earth's history with an emphasis on the stratigraphic and fossil records.

Course Prerequisite(s) and/or Corequisite(s)

None

Student Learning Outcomes

Describe how the scientific method is used to understand natural phenomena (ILO 2)

Apply rock and fossil classification systems to organize and identify key indicators of Earth's evolution and history as well as the major evolutionary stages and extinctions present in the fossil record. (ILO 2)

Describe the fundamental components, energy transfer, and landforms involved in plate tectonics. Use these principles to describe the supercontinent cycle. (ILO 1, 2 and 5)

Explain the basis of the geologic time scale and recount the milestone events in Earth's history. (ILO 1, 2 and 4)

Course Objectives

1.Explain and apply the principles of the scientific method.

2.Demonstrate and apply a fundamental understanding of concepts and principles of Historical Geology including:

- A) Fossilization,
- B) The fossil record,
- C) Ecology, evolution and extinction,

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D) Plate tectonics,

E) Geologic time and dating methods,

F) The Supercontinent Cycle and paleoclimate.

3. Identify representative physical samples of fossils, rocks and minerals.

4. Explain and apply knowledge of tectonic processes to interpret geologic events throughout geologic time.

5. Interpret geologic maps, cross sections and stratigraphic columns.

6. Apply the principles of relative dating to interpret sequences of geologic events.

7. Communicate complex course concepts effectively in writing and diagrams.

Textbooks & Other Resources or Links

The Story of Earth: An Observational Guide (developed for online courses; OER material)
Daniel Hauptvogel and Jinny Sisson

Course Requirements and Instructional Methods

Exercises in observations, sketching, Google Earth, plotting, keeping a geology notebook...

Course Grading Based on Course Objectives

Course Philosophy and Teaching Method: The subject of Earth Science is as vast and diverse as the natural world around us. Together, we will explore and visualize this dynamic world in a number of ways; in no way will it be a static collection of facts. Accordingly, we will concentrate on understanding natural processes and how we explore and learn things about our planet, rather than terms and factual trivia. We will concentrate on active, inquiry-based learning and will learn how to observe, think about, and understand our place in the natural environment. The critical inquiry and observational skills that we cultivate this semester should be useful in any profession, since they give you an appreciation of how earth science processes in our natural world impact our environment and society.

It is your responsibility and obligation to complete the required readings each week and prior to any online quizzes.

Course Expectations: My role in this class is to provide a framework that includes theory, best practices, activities, and assignments for you to utilize in the development of your knowledge, understanding, and skills. I care very much how and what you learn in this class, but I believe that you are responsible for participating in learning from the activities provided. This class requires significant preparation and reading.



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Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

Academic Honesty

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to 'cite a source' correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.
- Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Course Policies

Attendance

- A student who fails to show up for the first class meeting can be dropped by the instructor. For an online class, this means not completing (or attempting to complete) and submitting required assignments during the first week. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See the [IVC General Catalog](#) for details.
- Furthermore, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.

Online Classroom "Netiquette"

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word (this applies to strictly online and hybrid classes).
- Netiquette rules to remember: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional



icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Other Course Information

[Optionally, include other necessary information.]

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar Fall 2024

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
August 12-18	Syllabus & Introduction (Orientation)	
Lesson 1 August 11-17	Chapter 0 Geologic Skills	
Lesson 2 August 18-24	Chapter 1 Plate Tectonics	
Lesson 3 August 25-31	Chapter 2 Earth Materials	
Lesson 4 Sept 1-7	Chapter 3 Geologic Time	
Lesson 5 Sept 8-14	Chapter 4 Sedimentary Structures	
Lesson 6 Sept 15-21	Chapter 5 Stratigraphy	
Lesson 7 Sept 22-28	Chapter 6 Fossil Preservation	
Lesson 8 Sept 29-Oct 5	Chapter 7 Fossils	
Lesson 8 (continued) Oct 6-12	Chapter 7 Fossils (continued)	
Lesson 9 Oct 13-19	Chapter 8 Paleoenvironments	

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Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Lesson 10 Oct 20-26	Chapter 9 Geologic Structures and Mapping	
Lesson 11 Oct 27-Nov 2	Chapter 10 Interpreting Earth's History Using Maps	
Lesson 12 Nov 3-9	Chapter 11 Paleoclimate	
Lesson 13 Nov 10-16	TBD	
Lesson 14 Nov 17-23		
Nov 24-30	Thanksgiving Break	
Lesson 14 Dec 1-7	Final's Week	

Subject to change without prior notice