

ERSC181

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Summary

Course : ERSC181 **Title :** Introduction to Geology

Length of Course : 8

Prerequisites : N/A **Credit Hours :** 3

Description

Course Description: Geology encompasses the study of our planet, and students in this course will explore: how it formed, the nature of its interior, the materials of which it is composed, landforms, earthquakes and volcanoes, geologic resources, and geologic history. Current events that students learn about in the news, ranging from volcanic eruptions, earthquakes, landslides, and more will fit into a larger picture of how Earth works and why such things happen.

Course Scope:

Objectives

At the conclusion of this course, the student will be able to:

- CO-1** Recognize the general structure of the Earth and how it was formed, including the origin of elements and mineral structures.
- CO-2** Recall how the Earth and living organisms have changed over the last four billion years.
- CO-3** State the dynamic processes of rock formation and deformation, volcanism, and earthquakes within the framework of Plate Tectonic Theory.
- CO-4** Compare and contrast igneous, sedimentary, and metamorphic rocks, including formation processes.
- CO-5** Recognize the geologic settings and formation processes for common landforms and soil types.
- CO-6** Identify the principles and processes related to transport and storage of subsurface and surface water.
- CO-7** State the physical and chemical properties of the oceans and atmosphere and how these affect climate.

CO-8 Identify present and future energy resources and associated challenges.

Outline

Week 1: A First Look at Planet Earth & Minerals

Learning Outcomes

CO-1

Required Readings

Johnson et al. -

Chapter [1 Understanding Science](#)

Chapter [3 Minerals](#)

Weekly Classroom Lesson 1

Assignments

Forum #1 Posts

must be at least 250 words long and submitted before the end of the first week.

Exam 1 (covers Lumen Module 1, and Johnson et al. Chapters 1 & 3; and Classroom Weekly Lesson 1)

Recommended Optional Reading

Recommended Media

Week 2: Telling Time Geologically & Plate Tectonics

Learning Outcomes

CO-2

CO-3

Required Readings

Johnson et al. -

7 [Geologic Time](#)

[2 Plate Tectonics](#)

Weekly Classroom Lesson 2

Assignments

Exam 2 (questions cover Johnson et al. Chapters 7 & 2; and Weekly Classroom Lesson 2)

Forum #2 Posts due

Recommended Optional Reading

Recommended Media

Week 3: Earthquakes, Igneous Rocks & Volcanoes

Learning Outcomes

CO-3

CO-4

Required Readings

Johnson et al.

Sections [9.6 - 9.9 Earthquakes](#)

[4 Igneous Processes and Volcanoes](#)

Weekly Classroom Lesson 3

Assignments

Exam 3 (covers Johnson et al. Chapter 9 (sections 9.6 – 9.9 only), and Chapter 4; and Weekly Classroom Lesson 4)

Forum #3 Posts due

Recommended Optional Reading

Recommended Media

Week 4: Weathering and Soils & Sedimentary Rocks

Learning Outcomes

CO-5

CO-4

Required Readings

Johnson et al.-

[5 Weathering, Erosion, and Sedimentary Rocks](#)

[10 Mass Wasting](#)

Assignments

Exam 4 (questions cover Johnson et al. Chapters 5 & 10; and Weekly Classroom Lesson 4)

Forum #4 Posts due

Recommended Optional Reading

Recommended Media

Week 5: Crustal Deformation & Metamorphic Rocks

Learning Outcomes

CO-3

CO-4

Required Readings

Johnson et al.-

Chapter sections 9 – 9.5 Crustal Deformation and Chapter 6 Metamorphic Rocks; and Classroom Weekly Lesson 5

Assignments

Exam 5 (questions cover Johnson et al. chapter 9 – 9.5, and Chapter 6; and Classroom Weekly Lesson 5)

Forum #5 Posts due

Recommended Optional Reading

Recommended Media

Week 6: Groundwater, Surface Water & the Atmosphere

Learning Outcomes

CO-6

CO-7

Required Readings

Johnson et al.-

[11 Water](#)

[12 Coastlines](#)

Weekly Classroom Lesson 6

Assignments

Exam 6 (Questions cover Johnson et al. Chapters 11 & 12; and Weekly Classroom Lesson 6)

Forum #6 Posts due

Recommended Optional Reading

Recommended Media

Week 7: Deserts, Glaciers & Climate Change

Learning Outcomes

CO-7

CO-5

Required Readings

Johnson et al.-

[13 Deserts](#)

[14 Glaciers](#)

[15 Global Climate Change](#)

Weekly Classroom Lesson 7

Assignments

Exam 7 (Questions cover Johnson et al. Chapters 13, 14, and 15; and Weekly Classroom Lesson 7)

Forum #7 Posts due

Recommended Optional Reading

Recommended Media

Week 8: Earth's Resources & Earth History Final Comprehensive Exam

Learning Outcomes

CO - 2

CO- 8

Required Readings

Johnson et al.-

[8 Earth History](#)

[16 Energy and Mineral Resources](#)

Weekly Classroom Lesson 8

Assignments

Final Exam (covers all material from Weeks 1– 8, including all Weekly Classroom Lessons)

Forum #8 Posts due

Recommended Optional Reading

Recommended Media

Evaluation

Grading:

Name	Grade %
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Materials

Book Title: Various resources from the APUS Library & the Open Web are used. Please visit <http://apus.libguides.com/er.php> to locate the course eReserve.*

Author:

Publication Info:

ISBN: ERESERVE NOTE

Course Guidelines

Citation and Reference Style

Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

Tutoring

Tutor.com offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

Late Assignments

Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment. Generally speaking, late work may result in a deduction up to 15% of the grade for each day late, not to exceed 5 days.

As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.

“Substantive” means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says “I agree” is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.

As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.

Identity Verification & Live Proctoring

Faculty may require students to provide proof of identity when submitting assignments or completing assessments in this course. Verification may be in the form of a photograph and/or video of the student's face together with a valid photo ID, depending on the assignment format.

Faculty may require live proctoring when completing assessments in this course. Proctoring may include identity verification and continuous monitoring of the student by webcam and microphone during testing.

University Policies

[Student Handbook](#)

- [Drop/Withdrawal policy](#)
- [Extension Requests](#)
- [Academic Probation](#)
- [Appeals](#)
- [Disability Accommodations](#)

The mission of American Public University System is to provide high quality higher education with emphasis on educating the nation's military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

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