

ERSC204

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 : ERSC204 **Title :** Earth System History

Length of Course : 8

Prerequisites : SCIN138 **Credit Hours :** 3

Description

Course Description: Earth System History explores the amazing history of our planet. Many astonishing events of the geologic past, and the science behind how they came to be understood are examined. The Earth and its inhabitants have undergone continuous change during the last 4.56 billion years. These changes are investigated using an integrated approach that considers the inter-relationships between the solid Earth, atmosphere, hydrosphere, and biosphere. Thus, students learn how our planet became a place where life began and continued to flourish; how change has dominated Earth history; and how continuing changes to Earth's subsystems may challenge us in the future. Prerequisite: SCIN138

Course Scope:

This Earth Systems History Course presents the amazing history of the Earth, from the formation of the solar system to the present, and the science behind that history. This course is organized into three major themes: the immensity of geologic time, plate tectonics, and evolution of organisms. The vastness of geologic time is almost unimaginable to the human mind, and the brilliant insights of early geologists and their important contributions in reconstructing Earth's history are examined. This is a fascinating detective story. Historical geologists see the clues left behind as the result of long past events, and then work backwards in time to figure out what happened millions of years ago. Relative and absolute dating methods, and rocks and fossils are the clues that geologists use to solve the puzzle of what happened in the long-gone past. How and what these clues tell historical geologists about the past is explored in depth. A recurring theme in this course is how the continents, oceans, and atmosphere evolved and interacted over time, and how these naturally changing Earth systems influenced life throughout geologic time. The actual history of our planet, including the most up-to-date sequence of physical and biological events starting from 4.56 billion years ago, is presented. The vast and astonishing array of plants and animals that populated long-gone ages is chronicled. The end of the story of the changing Earth is us, and our discovery of Earth's amazing history! By studying the past, we can better understand what challenges lay ahead as the result of human-caused changes to Earth's dynamic systems.

Objectives

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

- CO-1** Describe the methods used in reconstructing Earth history and the important contributions of early geologists.
- CO-2** Compare and contrast absolute and relative methods for dating rocks.
- CO-3** Describe the immensity of time represented by the geologic time scale and how it was constructed.
- CO-4** Explain the nature and origin of Earth materials.
- CO-5** Explain how rocks and fossils reveal events of the geologic past.
- CO-6** Recall major events in the history of the planet, from formation of the solar system to the present.
- CO-7** Relate how past Earth system changes affected the evolution and history of life.
- CO-8** Recognize the complexity of Earth's natural systems and how changes affect organisms.
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Outline

Week 1: Discovering Time and Deciphering Earth's Amazing History

Learning Objective(s)

CO-1

CO-2

CO-3

Reading(s)

Levin-

Chapter 1: The Science of Historical Geology;

Chapter 2: Early Geologists Tackle History's Mysteries;

Chapter 3: Time and Geology.

Assignment(s)

Forum #1

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

Week 1 Quiz

Week 2: What Rocks, Minerals, and the Sedimentary Archives Tell Us About Earth History

Learning Objective(s)

CO-4

CO-5

Reading(s)

Levin-

Chapter 4: Rocks and Minerals: Documents that Record Earth's History;

Chapter 5: The Sedimentary Archives.

Assignment(s)

Week 2 Quiz

Forum #2

Week 3: What Fossils Tell Us; and Plate Tectonics Underlies all Earth History

Learning Objective(s)

CO-4

CO-5

Reading(s)

Levin-

Chapter 6: Life on Earth: What Do Fossils Reveal?

Chapter 7: Plate Tectonics Underlies All Earth History.

Assignment(s)

Week 3 Quiz

Forum #3

Week 4: The Formative Stages, and the Archean and Proterozoic Eons

Learning Objective(s)

CO-6

CO-7

CO-8

Reading(s)

Levin-

Chapter 8: The Earth's Formative Stages and the Archean Eon;

Chapter 9: The Proterozoic: Dawn of a More Modern World.

Assignment(s)

Week 4 Quiz

Forum #4

Week 5: Paleozoic Events

Learning Objective(s)

CO-6

CO-7

CO-8

Reading(s)

Levin-

Chapter 10: Early Paleozoic Events;

Chapter 11: Late Paleozoic Events

Assignment(s)

Week 5 Quiz

Forum #5

Week 6: Paleozoic Life; and Mesozoic Events

Learning Objective(s)

CO-6

CO-7

CO-8

Reading(s)

Levin-

Chapter 12: Life of the Paleozoic;

Chapter 13: Mesozoic Events.

Assignment(s)

Week 6 Quiz

Forum #6

Week 7: Mesozoic Life; and Cenozoic Events

Learning Objective(s)

CO-6

CO-7

CO-8

Reading(s)

Levin-

Chapter 14: Life of the Mesozoic;

Chapter 15: Cenozoic Events.

Assignment(s)

Week 7 Quiz

Forum #7

Research Project Due

Week 8: Cenozoic Life; and Human Origins

Learning Objective(s)

CO-6

CO-7

CO-8

Reading(s)

Levin-

Chapter 16: Life of the Cenozoic;

Chapter 17: Human Origins.

Assignment(s)

Final Exam (covers all material from Weeks 1– 8)

Forum #8

Evaluation

Quizzes

The quizzes are on-line, open-book, and timed. They may include multiple choice, fill in the blank, and short essay type questions. They are due by the end of each week. You are not to collaborate on quizzes – all work must be your own.

Final Exam

The Final Exam will be comprehensive and cover weeks 1-8. The exam is on-line, open-book, and timed. It may include multiple choice, fill in the blank, and short essay type questions. You are not to collaborate on the Final Exam – all work must be your own.

Research Project:

Students will prepare and present an online presentation on a research topic of their choice (approved by the instructor), which is related to the course content. The presentation will be done using either PowerPoint or Prezi, and a video of the presentation including voice narration will be made using the Kaltura system. This exercise is designed to have each student conduct research, assess and summarize his or her research findings, and present these findings online with voice narrated slides. This will be just like writing a research paper, except that the research findings will be presented in outline form in PowerPoint or Prezi with voice narration, rather than as a research paper. Just like a research paper, your presentation should include slides that contain a title, introduction to the topic, main body, summary and conclusions, and bibliography. Creative use of properly cited graphics and photos that are relevant to your topic is required. The exercise has three primary purposes: 1) to show you are very familiar with the topic, 2) to become familiar with PowerPoint or Prezi software, and 3) to express your knowledge in an oral presentation format - efficient and understandable, captivating for your audience. Please check the assignment instructions for the details on the research project.

Goals of this project include encouraging development of research skills, familiarization with presentation of academic material, and practice in communicating research to an “audience”. If you do not have access to PowerPoint, you may download Microsoft Office365 through the University. The grading rubric is posted in the classroom.

Please see the [student handbook](#) to reference the University’s [grading scale](#).

Grading:

Name	Grade %
Forums	16.00 %
Forum #1	2.00 %
Forum #2	2.00 %

Forum #3	2.00 %
Forum #4	2.00 %
Forum #5	2.00 %
Forum #6	2.00 %
Forum #7	2.00 %
Forum #8	2.00 %
Quizzes	56.00 %
Quiz 1	8.00 %
Quiz 2	8.00 %
Quiz 3	8.00 %
Quiz 4	8.00 %
Quiz 5	8.00 %
Quiz 6	8.00 %
Quiz 7	8.00 %
Research Project	10.00 %
PowerPoint Presentation	10.00 %
Final Exam	18.00 %
Final Exam	18.00 %

Materials

Book Title: The Earth Through Time, 10th ed. - the VitalSource e-book is provided via the EDMAP bookstore

Author: Levin

Publication Info: Wiley

ISBN: 9781118254677

Book Title: You must validate your cart to get access to your VitalSource e-book(s). If needed, instructions are available here - <http://apus.libguides.com/bookstore/undergraduate>

Author: N/A

Publication Info: N/A

ISBN: N/A

Required Technology

- See the Technology Requirements section of the undergraduate catalog for the minimum hardware and software requirements.

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](https://www.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 20% 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.

University Policies

[Student Handbook](#)

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

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