

U.S. INTERNATIONAL CHRISTIAN ACADEMY

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U.S.I.C.A. Course Outline/Syllabus

Grade/Course: EARTH SCIENCE & Lab 2001310

Grade Level: 10THHigh School

A)TEXT BOOK: <u>Earth Science</u> : Earth10th edition 2011 Introduction to Physical Geology Authors: Edward J Tarbuck, Frederick K Lutgens, Dennis Tasa, Dennis G Tasa ISBN 0321663047 - ISBN-13:9780321663047

Order No.: 1	Code:EAS2001	Class Type: Online
Resources: Text book Teacher works CD Teacher interactive online		Instructional Supports: Textbook, Magazines, Journals, Websites Links, Video Conference, Comprehensive Reading Plan, Nat. Science Foundation, Discovery Channel, NASA, PBS Television,
Links Sky Conference, Skype, Zoom, Social Media Area: Science	Length: 1 year Credits: 1	Skype, Zoom, e-Library, Social Media Total Numbers of class hours:300 hrs
Type: Mandatory	Standards: Florida Standards www2.dadeschools.net	Prerequisite: Students must have successfully passed a Science class in middle/high school.

B) Description:

This one-year course of emphasizes the study of Earth Science. Earth's profile and structure; water and the planet, groundwater, the atmosphere, weather and climate, clouds, precipitation, winds, forecasting, photosynthesis and respiration, seed plants and seedless plants, mammals, birds, insects, amphibians and reptiles.

C) Objectives:

- 1. To develop in all students an understanding the exploring Earth's Planet
- 2. to develop in all students to investigate the nature of the universe and the plant
- 3. to promote the study of astronomy, earth's water, weather, climate, and earth's changing surface.

D) Contents

CHAPTER 1 An Introduction to Geology 1

CHAPTER 2 Plate Tectonics: A Scientific Revolution Unfolds 39

CHAPTER 3 Matter and Minerals 73

CHAPTER 4 Magma, Igneous Rocks, and Intrusive Activity 107

CHAPTER 5 Volcanoes and Volcanic Hazards 137

CHAPTER 6 Weathering and Soil 173

CHAPTER 7 Sedimentary Rocks 199

CHAPTER 8 Metamorphism and Metamorphic Rocks 229

CHAPTER 9 Geologic Time 255

CHAPTER 10 Crustal Deformation 279

CHAPTER 11 Earthquakes and Earthquake Hazards 303

CHAPTER 12 Earth's Interior 333

CHAPTER 13 Divergent Boundaries: Origin and Evolution of the Ocean Floor 355

CHAPTER 14 Convergent Boundaries: Origin of Mountains 381

CHAPTER 15 Mass Wasting: The Work of Gravity 405

CHAPTER 16 Running Water 429

CHAPTER 17 Groundwater 461

CHAPTER 18 Glaciers and Glaciation 489

CHAPTER 19 Deserts and Winds 519

CHAPTER 20 Shorelines 541

CHAPTER 21 Global Climate Change 575

CHAPTER 22 Earth's Evolution through Geologic Time 609

CHAPTER 23 Energy and Mineral Resources 643

CHAPTER 24 Planetary Geology 671

APPENDIX A Metric and English Units Compared 703

GLOSSARY 704

E. Methodology

E)Academic Methodology:	
Tests	30%
Writing Reports	20%
Homework	5%
Class Work	20%
Reading Assignment	25%

F) Book Reference:

 Earth Science for High School [Kindle Edition] CK-12 Foundation (Author)
High School Earth Science Review (Review Smart) [Paperback] Michael Bentley (Author)
HIGH SCHOOL PHYSICAL SCIENCE: CONCEPTS IN ACTION W/EARTH & SPACE SCIENCE STUDENT EDITION [Hardcover] PRENTICE HALL (Author)
Earth Science (13th Edition) [Hardcover] by Edward J. Tarbuck, Frederick K. Lutgens and Dennis G Tasa (Authors)

5.Applications and Investigations in Earth Science (7th Edition) [Spiral-Bound] by Edward J. Tarbuck, Frederick K. Lutgens, Dennis G Tasa and Kenneth G. Pinzke (Authors)

H) Web Reference:

http://newyorkscienceteacher.com/sci/pages/links/es.php http://highered.mcgraw-hill.com/sites/0072482621/student_view0/interactives.html# http://earthsci.org/links/links.html www.worldvolcanoes.info www.internet4classrooms.com/earthspace.htm www.ncsu.edu/imse/1/earth.htm www.bownet.org/Ineal/earth science links.htm www.uky.edu/KGS/education/edustandalpha.htm http://en.wikipedia.org/wiki/Earth science http://epod.usra.edu/blog/links.html http://www.marlimillerphoto.com/geopix.html www.mp.k12.wi.us/faculty/dvangalen/Earth Science Links.cfm www.geology.com www.flinnsci.com/.../physical-science-links www.homelink.cps-k12.org/teachers/wrighka/hyperlinks2.html www.myteacherpages.com/webpages/SMorrell/physical.cfm www.linktoscience.schoolspecialty.com www.sciencenetlinks.com http://www.physicsclassroom.com http://www.everydaylearning.com/bscsblue

I .<u>Journals</u>

Journal in Earth Science Science Daily

J. Magazines:

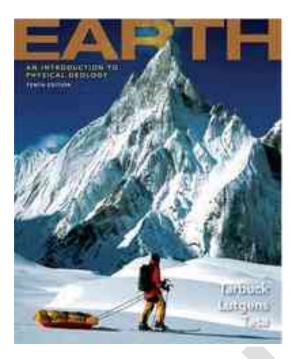
Smithsonian magazine, published by the Smithsonian Museum American Scientist magazine Discover magazine K. <u>Organizations</u>

N.A.S.A. National Science Foundation National Science Teachers Association Discovery Channel, PBS Public Television

M. Comprehensive Reading Plan

Students are required to read at least 1 book or their equivalent during each class as independent reading at-home. Students must also read for 30 minutes at home as part of their daily homework assignment in all subjects. Check your Class Reading Assignment at www.USICAhs.org/CURRICULUM and check free e-books at www.openlibrary.org

BOOK:



<u>Text Book: Earth Science</u> Earth10th edition 2011 Introduction to Physical Geology Authors: Edward J Tarbuck, Frederick K Lutgens, Dennis Tasa, Dennis G Tasa <u>Course: No. 2001310</u> ISBN 0321663047 - ISBN-13:9780321663047

ACADEMIC MISCONDUCT:

Academic misconduct includes cheating (using unauthorized materials, information, or study aids in any academic exercise), plagiarism, falsification of records, unauthorized possession of examinations, intimidation, and any and all other actions that may improperly affect the evaluation of a student's academic performance or achievement, or assisting others in any such act or attempts to engage in such acts. Academic misconduct in any form is inimical to the purposes and functions of the school and therefore is unacceptable and prohibited.

Any faculty member, administrator or staff member may identify an act of academic misconduct and should report that act to the department head or administrative supervisor. Students violating the standards of academic honesty are subject to disciplinary action including reduction of a grade(s) in a specific course, assignment, paper, or project; a formal or informal reprimand at the professorial, dean, or academic vice president level; expulsion from the class in which the violation occurred; expulsion from a program; or expulsion from the school.

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