

<b>Course Title: EARTH SCIENCE IIIA</b>	<b>Course Description</b>
<p><b>Course No.</b> 3351                      <b>Grade level:</b> 8-12</p> <p><b>Text and Resource Options:</b>  A. <i>Globe Earth Science</i>, Part I; Globe Fearon  B. <i>Science Explorer: Earth Science</i>, Part I, Prentice Hall</p>	<p><b>Course Value:</b> *One Semester</p> <p><b>Credit Value:</b> 1 – 5 credits</p>
<b>Course Content: Key Content Standards and Course Objectives</b>	
<p><b>The following objectives are based on the Grades 9-12 Earth Science content standards:</b></p> <ol style="list-style-type: none"> <li>1. <b>Earth’s place in the Universe:</b> Astronomy and planetary exploration reveal the structure, scale, and change of the solar system over time.</li> <li>2. <b>Earth’s place in the Universe:</b> Earth-based and space-based astronomy reveals the structure, scale, and change over time of stars, galaxies and the universe.</li> <li>3. <b>Dynamic Earth Processes:</b> Plate tectonics operating over geologic time has changed the patterns of land, sea, and mountains on the Earth’s surface.</li> <li>4. <b>California Geology:</b> The geology of California underlies the state’s wealth of natural resources as well as its natural hazards.</li> <li>5. <b>Structure and composition of the Atmosphere:</b> Life has changed Earth’s atmosphere and changes in the atmosphere affect conditions for life.</li> </ol> <p><b><u>Investigation and Experimentation</u></b>  Students will ask meaningful questions and conduct careful investigations addressing the content of the above Earth Science standards.</p>	<p>Through this course students will gain understanding of the physical and chemical processes that formed and continue to operate here on Earth. As they study these standards, students will also learn more about the geological factors that help make California special. Students will become familiar with the evidence that dates the Earth at 4.6 billion years old.</p> <p>*Open entry/open exit</p>
<b>Methods of Study</b>	
<ol style="list-style-type: none"> <li>1. Students will complete all activities assigned.</li> <li>2. Students will participate in discussion with other class members and/or teacher.</li> </ol>	<p style="text-align: center;"><b>Evaluation of Performance Standards</b></p> <ol style="list-style-type: none"> <li>1. Students will complete all assignments with a minimum of 70% accuracy.</li> <li>2. The supervising teacher will be satisfied with the quality of the student’s work.</li> <li>3. The student must receive a minimum score of 70% on a teacher assigned final evaluation.</li> </ol>

EARTH SCIENCE IIIA  
**Course Outline: 3351**

**I. Textbook Assignment Options:**

A. *Globe Earth Science*, Part I (5.0 credits)

- Read: Units 1-5.
- Complete: all “Lesson Review” activities.
- Complete: “Unit Review” activities in Sections a, b, and c only.
- Complete two of the Extension activities listed below.

B. *Science Explorer: Earth Science*, Part I (5.0 credits)

- Read: Units 1-3.
- Complete: all “Section Review” questions.  
Complete: “Chapter Assessment” activities (**Omit**: “Thinking Critically” and “Applying Skills” sections).
- Complete one of the Extension activities listed below.

C. *Exploring Earth Science* (5.0 credits)

- Read: Chapters 1 –12
- Complete: all Section Reviews (omit Critical Thinking/Connection)
- Complete: all Chapter Reviews – Multiple Choice and True or False
- Complete one the following Extension Activities.

**II. Extension Activity Options:** (All writing assignments should meet Writing Rubric Exp. III standards)

1. Use at least 2 sources to conduct research on the rock cycle. These may include the Internet, a library book, or another media resource. If using the Internet, the search term: “rock cycle earth science” will give you a number of websites that discuss the rock cycle and the 3 types of rock formations. Either write a 4-paragraph essay or prepare an 8-slide PowerPoint presentation based upon your research.
2. Complete a PowerPoint presentation on the structure of the Earth. This presentation must include Earth’s layers and descriptions of plate tectonics. The presentation should include at least 8 slides with graphics and descriptive text.
3. Use any Website on the Internet or use the United States Geologic Survey’s Website to research the topic of volcanoes (hint: use the search term “volcanoes USGS” ). Write a 4-paragraph essay based upon your research.
4. Using the Internet, your textbook, or any resources of your choice, research the ozone layer. Write three paragraphs explaining what the ozone layer is and how it affects the Earth.
5. Using the Internet, your textbook, or any resources of your choice, research why and how earthquakes occur. You will need to include information on the scales used to measure earthquake intensity and magnitude. The report needs to be at least three paragraphs in length.
6. Teacher generated activity, approved by the site administrator.

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## **III. Evaluation**

- See your teacher for a unit test.
- All Writing assignments must meet the proficient level of the rubric provided by the teacher.
- All textbook work must meet 70% accuracy level for a “C” grade.