# COURSE SYLLABUS

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Earth Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
<td>Mathematics and Science</td>
</tr>
<tr>
<td>Curriculum:</td>
<td>Science</td>
</tr>
<tr>
<td>Date submitted:</td>
<td>Spring 2014 (AAC:14-12)</td>
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</tbody>
</table>

## Course Code: (eg. ACC 101)

| EAS*102 |

## Course Type:

L

## Course Descriptors:

Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

## Prerequisites:

None

## Elective Type:

G/LAS/S

## Credit Hours:

| 3 |

## Developmental:

| (yes/no) |
| No |

## Lecture:

| 3 |

## Clinical:

| 0 |

## Lab:

| 0 |

## Studio:

| 0 |

## Other:

| 0 |

## TOTAL:

| 3 |

## Class Maximum:

| 35 |

## Semesters Offered:

| F/Sp/Su |

## Corequisites:

None

## Other Requirements:

None

## Catalog Course Description:

An introductory overview of our planet, earth, including important aspects of physical and historical geology: rock types, minerals, plate tectonics and estimates of the age of the earth, land forms, ground water, and erosion; physical oceanography: oceans, currents and water masses; meteorology: weather systems, wind-ocean interactions and climatology; astronomy: planets and moons in our solar system and the sun. This course qualifies as a science elective for non-science majors. Field trips may be required.

## Topical Outline:

List course content in outline format.

1. Minerals: Building Blocks of Rocks
2. Rocks: Materials of the Solid Earth
3. Weathering, Soil, and Mass Wasting
4. Running Water and Ground Water
5. Glaciers, Deserts, and Wind
6. Earthquakes and Earth’s Interior
7. Plate Tectonics
8. Volcanoes and other Igneous Activity
9. Mountain Building
10. Geologic Time  
11. Earth’s History  
12. The Ocean Floor  
13. Ocean Water and Ocean Life  
14. The Dynamic Ocean  
15. The Atmosphere: Composition, Structure, and Temperature  
16. Moisture, Clouds, and Precipitation  
17. Air Pressure and Wind  
18. Weather Patterns and Severe Storms  
19. Climate  
20. Origin of Modern Astronomy  
21. Touring our Solar System, Moon  
22. Light, and the Sun  
23. Beyond Our Solar System

Upon successful completion of this course, the student will be able to do the following:

**COURSE:**  
1. describe the rock cycle, including the processes of weathering and erosion  
2. explain the hydrologic cycle  
3. distinguish between glaciers, glacial erosion, and resulting landforms  
4. demonstrate a written understanding of plate tectonics and earth structure, based on seismic and geologic studies  
5. explain the extent, composition, and circulation patterns of the major oceans  
6. describe the properties and relative importance of the atmospheric layers  
7. differentiate between weather and climate and its associated phenomenon  
8. explain the geologic history of the earth and formation of the solar system  
9. discuss the origin, composition, and structure of the universe

**PROGRAM:** (Numbering reflects Program Outcomes as they appear in the college catalog)  
N/A

**GENERAL EDUCATION:** (Numbering reflects General Education Outcomes as they appear in the college catalog)  
8. **Scientific Knowledge** - Students will gain a broad base of scientific knowledge and methodologies in the natural sciences. This will enable them to develop scientific literacy, the knowledge and understanding of scientific concepts and processes essential for personal decision making and understanding scientific issues.  
   **Demonstrates:** Consistently recalls and correctly applies discipline-specific terms, relevant theories, laws, and concepts to analyze and explain scientific information.  
   **Does Not Demonstrate:** Inconsistently recalls or incorrectly applies discipline-specific terms, relevant theories, laws, and concepts to analyze or explain scientific information.

**Evaluation:**  
List how the above outcomes will be assessed.  
Tests  
Quizzes  
Final examination  
Homework  
In-class assignments  
Written papers

Original-4/10/07
# Instructional Resources:

<table>
<thead>
<tr>
<th>List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required: Computer, computer projection system, internet accessibility, DVD and VCR player, white board, document camera, rocks, minerals, maps, charts, globes, and other materials as required</td>
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<tr>
<td>Desired: Field Trips</td>
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<th>Textbook(s)</th>
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