

COURSE SYLLABUS

Course Title:	Earth Science		Date submitted:	Spring 2014 (AAC:14-12)
Department:	Mathematics and Science			
Curriculum:	Science			
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101)	EAS*102	Prerequisites:	
	Course Type:	L	None	
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: M: Seminar Internship P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/Clinical/Lab Z: Combined Lecture/Studio			
	Elective Type:	G/LAS/S		
	AH: Art History E: English FA: Fine Arts FL: Foreign Language G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science			
	Credit Hours:	3	Corequisites:	
	Developmental: (yes/no)	No	None	
	Contact Hours:	Lecture: 3 Clinical: 0 Lab: 0 Studio: 0 Other: 0 TOTAL: 3		
	Class Maximum:	35	Other Requirements:	
	Semesters Offered:	F/Sp/Su	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			

	<ol style="list-style-type: none"> 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
<p>Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>Upon successful completion of this course, the student will be able to do the following:</p> <p>COURSE:</p> <ol style="list-style-type: none"> 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 <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i> N/A</p> <p>GENERAL EDUCATION: <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <p>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.</p> <p>Demonstrates: Consistently recalls and correctly applies discipline-specific terms, relevant theories, laws, and concepts to analyze and explain scientific information.</p> <p>Does Not Demonstrate: Inconsistently recalls or incorrectly applies discipline-specific terms, relevant theories, laws, and concepts to analyze or explain scientific information.</p>
<p>Evaluation: List how the above outcomes will be assessed.</p>	<p>Assessment will be based on some or all of the following criteria:</p> <ul style="list-style-type: none"> Tests Quizzes Final examination Homework In-class assignments Written papers

<p>Instructional Resources:</p> <p>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.</p>	<p>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</p> <p>Desired: Field Trips</p>
<p>Textbook(s)</p>	<p>Tarbuck, Lutgens, Tasa, <u>Earth Science</u>, 12th ed.</p>