Miami Dade College

Course Competencies Template - Form 112

GENERAL INFORMATION	
Name: Dr. Curtis McKinney	Phone #: 7-1689
Course Prefix/Number: GLY1100	Course Title: Historical Geology
Number of Credits: 3	
Degree Type	☐ B.A. ☒ B.S. ☐ B.A.S ☒ A.A. ☐ A.S. ☐ A.A.S. ☐ C.C.C. ☐ A.T.C. ☐ V.C.C
Date Submitted/Revised: 5/15/08	Effective Year/Term: 2008-1
☒ New Course Competency ☐ Revised Course Competency	
Course to be designated as a General Education course (part of the 36 hours of A.A. Gen. Ed. coursework): ☒ Yes ☐ No	
The above course links to the following Learning Outcomes: ☒ Communication ☒ Numbers / Data ☒ Critical thinking ☐ Information Literacy ☒ Cultural / Global Perspective ☐ Social Responsibility ☐ Ethical Issues ☒ Computer / Technology Usage ☐ Aesthetic / Creative Activities ☒ Environmental Responsibility	
Course Description (limit to 50 words or less, **must correspond with course description on Form 102**): This is a historical based course in geology. The student will learn about the history of the earth, the evolution of life, radiometric dating, and the history of modern geologic ideas on earth development.	
Pre-requisite(s): none	Co-requisite(s): GLY1100L

Course Competencies: (for further instruction/guidelines go to: http://www.mdc.edu/asa/curriculum.asp)

Competency 1: The student will acquire knowledge of the history of the Earth by:

a. discussing the origin of fossils.
b. recognizing the major fossil groups.
c. describing the use of fossils indicators of relative age and ancient environments.
d. reconstructing paleo-environments from the analysis of sedimentary rocks and structures.
e. using stratigraphic analysis to interpret geologic events by order of occurrence.
f. evaluating the theories on the origins of the atmosphere, oceans, and the crust of the earth.

Competency 2: The student will understand the theory of evolution in earth history by:

a. correlating major events in the history of life with the geologic events of the associated eras/periods.
b. discussing Darwin's development of theory of evolution in terms of modern animals and plants and their ancient counterparts.
c. describing human evolution from primates to man.

Revision Date: _____

Approved By Academic Dean Date: _____ Reviewed By Director of Academic Programs Date: _____

Competency 3:	The student will demonstrate an understanding of radiometric dating by:

a. describing the different dating methods and their application to the age of the rocks.
b. discussing the effects of contamination and poor sampling on accuracy in radiometric dates.
c. comparing and contrasting the methods of absolute and relative dating.
d. arguing the pro and cons of carbon 14 dating.

Competency 4:	The student will understand the role of plate tectonics in the history of the earth by:

a. describing the evidences used by Wegener in the development of his theory of continental drift.
b. assessing the modern theory of plate tectonics by comparing it to continental drift.
c. arranging, according to plate tectonics the geologic orogenies on the North American plate and connect them to the geologic timescale.