Miami Dade College

Course Competencies Template - Form 112

GENERAL INFORMATION	
Name: Dr. Curtis McKinney	Phone #: 7-1689
Course Prefix/Number: GLY1100L	Course Title: Historical Geology Laboratory
Number of Credits: 1	
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**): A laboratory course designed to accompany GLY1100 in the study of the History of the Earth. The student will learn the fundamentals of fossil identification, evolution, calculation of radiometric dates, interpretion of the stratigraphic record, and the role of plate tectonics in the evolution of life.	
Pre-requisite(s): none	Co-requisite(s): GLY1100

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

Competency 1: The student will acquire knowledge of fossils by:

1. Recognizing the major fossil groups including human development.
2. Describing the process of fossilization.
3. Locating major fossil localities in North America and in Florida.
4. Demonstrating the methods of fossil collecting and preparation.

Competency 2: The student will acquire knowledge of history of the earth by:

1. Creating geologic maps.
2. Reading geologic maps.
3. Preparing geologic cross-sections.
4. Deriving the order of events from geologic cross-sections.

Competency 3: The student will acquire knowledge of radiometric dating by:

Revision Date: _____

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

1. Using the half-life law to calculate a radiometric date.
2. Applying radiometric dates to geologic cross-sections to produce an absolute chronology.
3. Summarizing multiply cross-sections to produce a geologic column.

Competency 4:	The student will acquire knowledge of plate tectonics by:

1. Demonstrating the best fit process of Wegener to reconnect the continents.
2. Evaluating the fossil and stratigraphic evidence for plate tectonics.