GLY 2100 Introduction to Historical Geology (3) (A.A./AS) Three hours lecture per week. This course meets Area V requirement for the AA/AS General Education requirements. Prerequisite: none, however previous science courses will be helpful. The course is designed to give the student an understanding of the geological history of the earth. The course is appropriate for non-science majors as well as those who will be majoring in environmental science, marine science geology, hydrology or other disciplines requiring knowledge of the history of the earth, paleontology, and earth materials. Course topics will include: the development of geology as a science, the scientific methodology of geology, uniformitarianism, history of the Earth, geological time, relative and numerical dating of the earth, fossils and their meaning, life through geological time, evolution of life, orogeny and the evolution of mountains, and Pleistocene glaciations and global climate changes. Climate changes effecting Florida will also be covered.

After completion of this course a student should be able to:

1. Explain uniformitarianism and the methodology of geology.
2. Explain and utilize the basic principles of relative dating methods and radiometric dating methods.
3. Describe the history of the earth, including early formation, the Precambrian, and Paleozoic eons.
4. List and describe the geological time scale including various time intervals in earth history and major fossil assemblages.
5. Describe the importance of the fossils record, its relation to evolution.
6. Describe the use of fossil assemblages and sequential stratigraphy.
7. Explain the basics of organic evolution related to biogeography, and paleontology.
8. Identify common taxonomic groups of fossil flora and fauna commonly found in the fossil record.
9. Describe the occurrence and causes of formations of continents and oceans basin.
10. Describe and explain orogeny and the evolution of mountains.
11. Describe and explain the occurrence of Pleistocene glaciation and the resulting geomorphology.
12. Describe and explain paleoclimate changes and the relationship to modern global climate changes.
13. Describe and explain eustatic sea level changes during the earth’s history.

Original Submission Date: October 2010
Date of Last Review: 
Date of Last Revision: