DATE: Spring 2008

COURSE NAME: Introduction to Geology (3-2)
PREFIX AND NUMBER: SCI 131
CREDIT HOURS AND CONTACT HOURS: 4 credit hours – 5 contact hours
COURSE DESCRIPTION:
A study of the principles of physical and chemical geology as a dynamic process by which our earth can be characterized as it changes through time. The course will include integrated laboratory and field trip experiences. Offered periodically.

II. COURSE OUTCOMES AND OBJECTIVES
1. Students will acquire a knowledge of the physical processes which have shaped our planet.
2. Students will learn the vocabulary of geology and be able to apply it to a variety of geological settings.
3. Students will gain enough geological knowledge to be able to identify geologic features around them.

III. METHOD OF INSTRUCTION
Text:

A combination of lecture and field trips. Overhead transparencies and slides will be used regularly to illustrate the learnings of the lectures. Active participation by students is expected.

METHOD OF EVALUATION
The highest four grades of the following five projects/examinations will be averaged for a final grade.
1) Three one hour, in-class examinations.
2) A Dictionary of Geological terms compiled during lectures.
3) A final paper consisting of three lesson plans designed to teach three different lessons about geology. The "audience" of the lessons is assumed to be children, ages 8-15. These lessons are to be hands-on, creative, interactive, and age-appropriate.

IV. GENERAL OUTLINE OF TOPICS COVERED:
Basic Geological Concepts
Plate Tectonics and the Ocean Floor
Earthquakes
Interior of the Earth
Minerals
Igneous Activity
Volcanism
Sedimentary Rocks
Metamorphic Rocks
Geologic Time
Rock Deformation
Plate Tectonics and Continental Crust
Weathering and Soils
Streams