

LINN BENTON COMMUNITY COLLEGE
CURRICULUM REVIEW: JANUARY 22, 2016

Course Name

GS 106 “Introduction to Physical Geology”

Percentage of Materials that are Open Educational Resource

Approximately 100% of course materials have been created by Linn Benton, or Linn Benton has obtained a creative commons license so the material is considered OER. The textbook being used is proprietary and obtained through Cengage.

Course Outcomes and Assessments Used

GS 106 has 3 stated course outcomes:

1. Have an understanding of the basic concepts, processes, and analytical tools related to the study of the universe.
2. Develop experimental skills and knowledge relating to the gathering and interpretation of scientific information.
3. Evaluate and articulate the relevance of atomic science, geology, atmospheric science, and astronomy on personal, local and global levels.

The GS 106 course is divided into credit units. The first credit unit covers basic concepts related to geology including minerals, rocks and geologic formations and contains three modules, with each module assessing competency through testing that requires the student to successfully demonstrate knowledge. In addition, modules have “self-check” points, which are quizzes that contain questions tied to textbook lessons and readings.

The first module provides an introduction to minerals. The second module focuses on rocks, and the third module covers geological time. All modules assess the student’s knowledge of concepts through graded quizzes. A final assessment at the end of the three modules comprehensively evaluates the student’s competency and understanding of all concepts through a written quiz.

The second credit unit contains two modules, which focus on tectonics and earthquakes. The first module covers plate tectonics, and the second module covers earthquakes. Both modules assess the student’s knowledge of concepts through graded quizzes and have “self-check” points, which are quizzes that contain questions tied to textbook lessons and readings. A final assessment at the end of the two modules comprehensively evaluates the student’s competency and understanding of all concepts through administration of a quiz.

The third credit unit contains two modules, which focus on groundwater, rivers and oceans. The first module covers fresh water sources and the relationships to geologic formations, and the second module covers oceans and concepts such as tidal patterns and ocean currents. Both modules assess the student’s knowledge of concepts through graded quizzes and have “self-check” points, which are quizzes that contain questions tied to textbook lessons and readings. A final assessment at the end of the two modules comprehensively evaluates the student’s competency and understanding of all concepts through administration of a quiz.

The fourth credit unit contains three modules, which focus on atmosphere, weather and climate change. The first module covers the atmosphere and its composition. The second module covers weather and the third module covers climate change. [NOTE: The introductions to modules 2 and 3 were the wrong ones—they linked to the oceans module introduction.] All modules assess the student’s knowledge of concepts through graded quizzes and have “self-check” points, which are quizzes that contain questions tied to textbook lessons and readings. A final assessment at the end of the three modules comprehensively evaluates the student’s competency and understanding of all concepts through administration of a quiz.

All modules have assessments that require the student to demonstrate proficiency of the concepts taught in the modules. Proficiency is demonstrated through testing that includes concepts taught in lessons and readings. A final assessment at the end of the modules comprehensively evaluates the student’s competency and understanding of all concepts through administration of a quiz.

Teaching Methods

GS 106 is taught online. Teaching methods include the use of videos, articles, an online text book and practice exercises that students can conduct on their own time.

Industry Standards and the Course

The GS 106 course is not designed to embed particular industry standards; however, relevant scientific concepts related to the field of geology are integrated into the curriculum.