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| Received(time) | 10:51 AM |
| Date | 7/11/2006 |

**Ohio Articulation Number (OAN)**
**Course Submission Form**
**2005-2006**

College/University Bowling Green State University

Course(s) Submitted(Title & Course #) **GEOL 104.** *Earth Environments* for
Ohio Articulation Number OSC 011

Date April 6, 2006 Course _____ of a _____ Course OAN mapping.

Name and title of individual submitting on behalf of the college/university

Name Mark Gromko Title Vice Provost for Academic Programs

Address Provost's Office, BGSU, BG, OH 43403

E-mail mgromko@bgnet.bgsu.edu

Phone 419 372 7794

Fax 419 372 8446

Credit Hours 4 qtr _____ sem x
Lecture Hours 3
Laboratory Hours 2 (if applicable)
Pre-Requisites(s) Course work (if applicable)

Placement Score (if applicable)
(Name of test)
(Domain) (Score)

Catalog/Course Description (Includes Course Title and Course #)

**GEOL 104.** *Earth Environments (4).* Fall, Spring, Summer. Introduction to the science of geology. Relationship of man to physical environment of the earth and its natural resources. Three lectures and one two-hour laboratory. Credit allowed for no more than one: GEOL 100 ,GEOL 101 ,GEOL 104 . Applicable to the BG Perspective (general education) natural sciences requirement. Extra

fee.

Texts/Outside Readings/Ancillary Materials

Course Objectives and/or Plan of Work

**Course Goals:** A General Education Natural Science course is intended to provide an understanding of science. This knowledge is essential for any person who strives to be an informed citizen. Knowledge of basic science is important for rationally analyzing many current political issues, such as the environment, human health, and energy and other resources. The world in which you function continues to become more science and technology based. The goal of the General Education Natural Science requirement is to help you cope with this ever-growing complexity.

Learning Objectives

- To understand science in general and its importance to society
- To develop critical thinking and problem-solving skills
- To gain a better understanding and appreciation for Earth environments and processes and their relevance to society

Description of Assessment and/or Evaluation of Student Learning

See attached syllabus. Examples of techniques used to assess student learning include pre-and post-class non-graded exams, key questions geared to specific learning outcomes on final exams.

Master Syllabi and Working Syllabi (if both are used)

See attached working syllabus example. The following is from that document:

| week | date | | lecture topic | reading (text) | laboratory |
|---|---|---|---|---|---|
| 1 | JAN | 9 | introduction | 1.0–1.3 | No Lab |
| | | 11 | Earth systems | 1.4, 1.6 | |
| | | 13 | Earth interior | 1.5, 8.1 | |
| 2 | | 16 | NO CLASS - M.L. King Jr. Day | | GPS |
| | | 18 | minerals | 2.0–2.6 | |
| | | 20 | igneous rocks | 3.0–3.4, 4.0–4.1 | |
| 3 | | 23 | igneous rocks | 4.2, 4.4–4.7 | Minerals |
| | | 25 | volcanoes | 4.3, 4.8 | |
| | | 27 | weathering | 5.1 | |
| 4 | | 30 | weathering | | Igneous Rocks |
| | FEB | 1 | **EXAM 1** | | |
| | | 3 | sedimentary rocks | 5.0, 5.2–5.5 | |
| 5 | | 6 | sedimentary rocks | 5.6 | Sed./Met. Rocks |
| | | 8 | metamorphic rocks | 6.0–6.4, 6.8 | |
| | | 10 | geologic time | 6.7, 6.10, 7.1–7.5 | |
| 6 | | 13 | geologic time | 7.6, 7.7, 7.9 | **Lab Exam** |

| | | | | |
|---|---|---|---|---|
| | 15 | geologic time | | |
| | 17 | deformation | 11.0–11.4 | |
| 7 | 20 | structures | 11.5–11.7 | Geologic Time |
| | 22 | earthquakes | 11.8, 11.9 | |
| | 24 | earthquakes | 8.2, 8.4 | |
| 8 | 27 | Earth interior and geophysics | 13.1–13.3 | Topo. Maps |
| | MAR 1 | **EXAM 2** | | |
| | 3 | plate tectonics | 12.0, 12.1 | |
| 9 | 6 | NO CLASS - Spring Break | | No Lab |
| | 8 | NO CLASS - Spring Break | | |
| | 10 | NO CLASS - Spring Break | | |
| 10 | 13 | plate tectonics | 12.3 | Geo. Structure |
| | 15 | plate tectonics | 12.4, 12.5 | |
| | 17 | mountain building | 12.6–12.8 | |
| 11 | 20 | mass wasting | 13.5, 15.0-15.3 | Seismology |
| | 21 | mass wasting | 15.4, 15.5 | |
| | 23 | streams | 16.0–16.8 | |
| 12 | 27 | streams | 16.9–16.12 | Flood Hazards/ |
| | 20 | ground water | 17.0–17.3 | **Lab Exam** |
| | 31 | ground water | 17.4–17.5 | |
| 13 | APR 3 | **EXAM 3** | | Ground Water |
| | 5 | glaciers and glaciation | 18.0–18.3 | |
| | 7 | glaciers and glaciation | 18.4–18.8 | |
| 14 | 10 | glaciers and glaciation | 18.9–18.10 | DRASTIC |
| | 12 | glaciers and glaciation | 18.11 | |
| | 14 | winds and deserts | 20.0, 20.1, 20.3 | |
| 15 | 17 | winds and deserts | 20.2, 20.4, 20.5 | BG Geology |
| | 19 | oceans and coastal features | 19.0–19.3 | |
| | 21 | oceans and coastal features | 19.4–19.7 | |
| 16 | 24 | geology of Ohio | | **Lab Exam** |
| | 26 | resources | | |
| | 28 | global change | | |

**EXAM 4**: Wednesday, May 3, 8:30-10:30 AM

Additional Documentation

| | | |
|---|---|---|
| Lectures: | Overman Hall 095<br>Mo We Fr, 9:30-10:20 | |
| Laboratory: | Overman Hall 096 | Section 14091, We 4:30-6:20<br>Section 15666, Th 12:30-2:20 |
| Instructor: | Dr. Jeffrey Snyder | |
| Office: | 181 Overman Hall | |
| Phone: | 372-0533 | |
| E-mail: | jasnyd@bgsu.edu | |
| Web Page: | http://geology.bgsu.edu/Snyder/ | |
| Office Hours: | Mo We Fr, 10:30-11:20 (or by appointment) | |
| Textbook: | Lecture—Smith, G. A. & Pun, A. 2006. *How Does Earth Work*? Prentice Hall.<br>Lab manual—Individual labs must be printed from MyBGSU. | |
| Electronic Course Resources: | Notes, assignments, and other information for the lecture and lab will be provided on the course site on MyBGSU. | |

Tentative Schedule:

| week | date | | lecture topic | reading (text) | |
|---|---|---|---|---|---|
| | laboratory | | | | |
| 1 | JAN | 9 | introduction | 1.0–1.3 | No Lab |
| | | 11 | Earth systems | 1.4, 1.6 | |
| | | 13 | Earth interior | 1.5, 8.1 | |
| 2 | | 16 | NO CLASS - M.L. King Jr. Day | | |
| | GPS | | | | |
| | | 18 | minerals | 2.0–2.6 | |
| | | 20 | igneous rocks | 3.0–3.4, 4.0–4.1 | |
| 3 | | 23 | igneous rocks | 4.2, 4.4–4.7 | |
| | Minerals | | | | |
| | | 25 | volcanoes | 4.3, 4.8 | |
| | | 27 | weathering | 5.1 | |
| 4 | | 30 | weathering | | |
| | Igneous Rocks | | | | |
| | FEB | 1 | **EXAM 1** | | |
| | | 3 | sedimentary rocks | 5.0, 5.2–5.5 | |

| | | | | | |
|---|---|---|---|---|---|
| 5 | | 6 | sedimentary rocks | 5.6 | |
| | Sed./Met. Rocks | | | | |
| | | 8 | metamorphic rocks | 6.0–6.4, 6.8 | |
| | | 10 | geologic time | 6.7, 6.10, 7.1–7.5 | |
| 6 | | 13 | geologic time | 7.6, 7.7, 7.9 | **Lab** |
| **Exam** | | | | | |
| | | 15 | geologic time | | |
| | | 17 | deformation | 11.0–11.4 | |
| 7 | | 20 | structures | 11.5–11.7 | |
| | Geologic Time | | | | |
| | | 22 | earthquakes | 11.8, 11.9 | |
| | | 24 | earthquakes | 8.2, 8.4 | |
| 8 | | 27 | Earth interior and geophysics | 13.1–13.3 | |
| | Topo. Maps | | | | |
| | MAR | 1 | **EXAM 2** | | |
| | | 3 | plate tectonics | 12.0, 12.1 | |
| 9 | | 6 | NO CLASS - Spring Break | | No |
| Lab | | | | | |
| | | 8 | NO CLASS - Spring Break | | |
| | | 10 | NO CLASS - Spring Break | | |
| 10 | | 13 | plate tectonics | 12.3 | |
| | Geo. Structure | | | | |
| | | 15 | plate tectonics | 12.4, 12.5 | |
| | | 17 | mountain building | 12.6–12.8 | |
| 11 | | 20 | mass wasting | 13.5, 15.0-15.3 | |
| | Seismology | | | | |
| | | 21 | mass wasting | 15.4, 15.5 | |
| | | 23 | streams | 16.0–16.8 | |
| 12 | | 27 | streams | 16.9–16.12 | |
| | Flood Hazards/ | | | | |
| | | 20 | ground water | 17.0–17.3 | **Lab** |
| **Exam** | | | | | |
| | | 31 | ground water | 17.4–17.5 | |
| 13 | APR | 3 | **EXAM 3** | | |
| | Ground Water | | | | |
| | | 5 | glaciers and glaciation | 18.0–18.3 | |
| | | 7 | glaciers and glaciation | 18.4–18.8 | |
| 14 | | 10 | glaciers and glaciation | 18.9–18.10 | |
| | DRASTIC | | | | |
| | | 12 | glaciers and glaciation | 18.11 | |

| | | | | |
|---|---|---|---|---|
| | 14 | winds and deserts | 20.0, 20.1, 20.3 | |
| 15 | 17 | winds and deserts | 20.2, 20.4, 20.5 | BG |
| Geology | | | | |
| | 19 | oceans and coastal features | 19.0–19.3 | |
| | 21 | oceans and coastal features | 19.4–19.7 | |
| 16 | 24 | geology of Ohio | | **Lab** |
| **Exam** | | | | |
| | 26 | resources | | |
| | 28 | global change | | |

**EXAM 4**: Wednesday, May 3, 8:30-10:30 AM

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Geology 104: Earth Environments
Spring Semester, 2006

**Course Goals:** A General Education Natural Science course is intended to provide an understanding of science. This knowledge is essential for any person who strives to be an informed citizen. Knowledge of basic science is important for rationally analyzing many current political issues, such as the environment, human health, and energy and other resources. The world in which you function continues to become more science and technology based. The goal of the General Education Natural Science requirement is to help you cope with this ever-growing complexity.

Learning Objectives

- To understand science in general and its importance to society
- To develop critical thinking and problem-solving skills
- To gain a better understanding and appreciation for Earth environments and processes and their relevance to society

**Computerized Notes:** Text and figures presented in class by computer projection are available on the course site on MyBGSU. I suggest that you print or copy the notes in advance and bring them to lecture. By doing this, you will be more able to listen to lectures and to take additional notes. I have created these notes prior to the start of the course. Thus, there may be occasions when additions, revisions, or order changes will be required. These notes are not complete, and they should not be used as a substitute for class attendance.

**Exams:** There will be three exams during the semester and one exam during finals week. Exams will cover material both in the lectures and in the assigned readings. The format of the exams will be approximately 50% multiple-choice questions and 50% short-answer and essay questions. The exams will be non-cumulative, although certain topics will build on material from previous exams. In addition, there will be a

separate short exam with comprehensive questions administered with Exam 4 during the final exam period. Make-up exams will be given only with a verified, reasonable excuse. If you miss an exam, you must notify me within twenty-four hours, or no make-up exam will be allowed. All make-up exams will be essay questions.

**Quizzes on Readings:** Approximately 12 times during the semester, there will be unannounced short quizzes on the assigned textbook reading for the day. Your two lowest scores (or missed quizzes) will be dropped. No make-up reading quizzes will be allowed. Any required modifications to the readings schedule will be announced in class and by e-mail.

**Laboratory:** A separate syllabus will be distributed for the laboratory. Attendance in the laboratory is mandatory. You can not receive a passing grade in the class without passing the laboratory.

| **Grading:** | | |
|---|---|---|
| | 4 exams | 17% (each) |
| | readings quizzes | 5% (total) |
| | laboratory grade | 25% |
| | comprehensive questions (during final) | 2% |

I have a policy not to discuss or report grades by e-mail. For such matters, you are welcome to visit my office or ask before or after class.

**Student Conduct:** Students and faculty in this course are subject to the Code of Academic Conduct which can be found in the BGSU Student Handbook.

| OBR Use | Action |
|---|---|
| Approved | |
| Additional Information Requested | |
| Rejected | |
| Date | |