

Instructor:
Frankie Jackson



**BSSP Earth Science
Systems**
3 credits

Phone:
406-994-6642

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Purpose: To provide a general understanding of Earth and its systems and processes.

Description: This course will build on topics presented at the 10-day summer workshop held at the Little Big Horn Community College in June of 2010.

Text: *How Does Earth Work? Physical Geology and the Process of Science* by Gary A. Smith and Aurora Pun. Prentice Hall, New York 2006

Additional readings will be provided on-line

Course Goals: Knowledge gained from this class will:

- Help you to understand our planet, its formation, natural resources, and surficial processes.
- Allow you to teach these concepts to your students.
- Help you to find connections between western science and Native American knowledge of the Earth and geology.

Module Design: This course is designed in a module format. The course consists of 6 modules. Each module corresponds with topics that we will be discussing during each face-to-face meeting and consists of:

1. **Dates:** Each module has opening and closing dates. For example, each module will close at 9:00 pm on the designated date. **Please pay attention to the dates, as students will be unable to enter the module once it is closed.**
2. **Description:** Each module has a description of the content and student activities.
3. **Module Sections:** Each module will take 2-3 weeks to complete and includes the following: **Chapter Readings (about one each week)** and **Online Activities**. Your readings and activities are listed in the syllabus and are important to discussions. Additional resources may also be indicated in your syllabus and are practical resources for teaching and will assist you in your assignments. It may be helpful to print out or electronically file the resources and collect them in a portfolio folder as a resource for your school and to assist you in future teaching.
4. **Discussions:** Each module contains one or several discussion sections that relate to specific readings and activities. Students are expected to:

1. Read the assigned readings and complete all discussion questions and activities thoughtfully and thoroughly. **These should demonstrate to the instructor that you have read the chapter.**
2. Post your response as early as possible to provide ample time for others to respond to your posting.
3. Read ALL of the discussion postings, not just the discussions responding to your posting. The discussion area is your “classroom” and it is important to follow the discussion threads as they represent the ideas and contributions of everyone in the class. Lack of participation affects everyone in the class.
4. Actively ENGAGE in the discussions throughout the week. Posting your discussions all on one day does not constitute “active engagement” in the course. Posting your discussions “at the last minute” does not qualify as a discussion because other students and your instructors are unable to engage in a discussion with you.
5. Respond to your instructor's questions that may specifically be posed to you in the discussions.
6. Use the HTML editor for spelling and grammar check before posting your discussion.
7. Download the Self Evaluation at the beginning of each module. The form is available in “Content” under Course Resources. Fill in the form each week and submit it to the Drop Box at the end of the module.

Reminder: The technology in the course allows the instructor to track each individual student’s activity, including, student entry into the course or modules, number of postings and number of items read. **The modules will close at 9:00 pm on the designated dates. Students will not be able to enter them after that time.**

Email will be available through Web CT. Students can communicate with the instructor or other students privately. The instructor will use email to contact students individually or as a group so please check your email regularly.

Grades: A grading scale is included at the end of this syllabus.

Course Evaluations: Students are strongly encouraged to complete a course evaluation for each course. The course evaluations are found on the menu bar or on the home page for each syllabus. The course evaluations are anonymous as they are sent to the Burns Telecommunications Center. The Burns Center compiles the data and sends it to the instructors after the course is closed and grades are submitted.

Date	Topics	Modality and Focus	Pts
Sept. 13-30	Uniformitarianism Plate Tectonics Minerals	Module 1: Read <i>Chapter 1, emphasis on 1.3 - 1.6.</i> Read Chapter 2 (Minerals) On-line: In “Content” click on <i>Minerals in our environment.</i> Teacher’s Domain requires log in Post and Discussion, Self Evaluation	15
October 2	Mineral Identification	Face-to-face: Review of Summer Institute Hands-on activities on mineral identification	25
Sept 30 – Oct 14	Rocks & Rock Forming Processes Igneous Rocks	Module 2: <i>Chapters 3 and 4</i> Online: SciObjects, <i>Rocks: Categories by Process</i> Post, Discussion, Self Evaluation - USGS activity	20 10
Oct 14 – Oct 31	Metamorphic Rocks Sedimentary Rocks	Module 3: <i>Chapters 6 and 5 (in this order)</i> Online: SciObjects: <i>Environment of Formation</i> Post, Discussion, Self Evaluation	20 10
Nov. 6	Rock Identification & Use Geologic Time	Face-to-face: Hands on activities: rock identification Native American connection: <i>Rocks on the Reservation</i>	25
Oct 31 – Nov 14	Earth’s Time Keepers	Module 4: <i>Chapter 7</i> On-line SciObject, <i>Earth’s Autobiography</i> Post, Discussion, Self-evaluation	20 10
Nov. 14 – Nov. 28	Earth’s Structure	Module 5: <i>Chapters 8 and 9</i> Online – SciObject, <i>Plate Tectonics: Layered Earth</i> Post, Discussion, Self-evaluation	20 10
Nov. 28 – Dec. 12	Motion Inside Earth Rock Deformation	Module 6: <i>Chapter 10 and 11</i> Online – ScObject, <i>Changing Earth from Within</i> Post, Discussion, & Self-evaluation	20 10
Dec. 4	Earth’s Interior and Exterior Semester Review	Face-to-face: Hands on activities: <i>The Earth’s Interior</i> Native American connection: <i>TBA</i>	25

Grading Scale of the Course:

Posting, reading, self evaluation:	FJ/GW	65 points
On-line Activities (20 PTS)	FJ	100 points
Earth Science SCOOP PLANNING PRE-SURFVEY:	ES	60 points
face-to-face 25 pt each, Oct-Dec	GW	<u>75 points</u>
<u>Total points:</u>		300 points

90 to 100% = A 70 to 79% = C Less than 60 % = F

80 to 89% = B 60 to 69% = D