

COURSE SYLLABUS
EDEL 1450 Earth Science in the Elementary School

COURSE INFORMATION

- EDEL 1450
- Earth Science in the Elementary School
- 1.0 credit hour
- Spring 2013

INSTRUCTOR INFORMATION

- Instructor: Tina Christinck
- Office Location: Off-campus
- Email: tchristinck@ewcmail.wy.edu
- Phone: 307-322-5628 or 307-331-8045
- Office Hours: By appointment

COURSE CONTENT INFORMATION

- Catalog Description: This course covers the selection of basic earth science concepts to the teaching of elementary students. The course includes topics in geography, meteorology, geology, and astronomy. 1 hour lecture
- Course Rationale: EDEL 1450 will be a link between a college earth science course and what the prospective teacher will teach elementary students about earth science. This course will give direction to the prospective teacher on how to organize and conduct meaningful science experiences for elementary students.

Course objectives :

- To help pre-service and current elementary teachers gain confidence in their ability to teach science effectively and use scientific processes themselves.
- To help pre-service and current elementary teachers recognize common student misconceptions about earth science and help students gain a more accurate understanding of scientific concepts.
- To assist pre-service teachers in experiencing the effectiveness of the inquiry model of teaching.
- To introduce a variety of activities from various resources/curricula that may be useful in teaching physical sciences at elementary grade levels.
- To promote project-based and inquiry learning in science education.

Resources to be used include:

- Textbook: No textbook purchase required. Instructor will provide course materials.
- Lancernet: <http://prod.campuscruiser.com/ewc>
- McGraw-Hill's Access Science: www.accessscience.com
Username: ewclibrary
Password: Lib123\$
- EWC Library Databases: <http://ewc.wy.edu/services/library/menu.cfm>
Username: ewclibrary
Password: Lib123\$

Course schedule:

*This is a tentative outline for topics and due dates for the course. This schedule is subject to change, and you will be notified if it does change.

Week	Dates	Topics	Due Dates
1	03/13/13- 3/20/13	Introduce Scientific Misconceptions Article Review Assignment	Article Review due Thursday 3/21/13 at 10pm
2	3/20/13- 4/4/13	Properties of the Earth (Dirt, Rocks and Air) Activity Review	Activity Review Assignment due Thursday 4/4 at 10pm
	03/25/13- 4/2/13	Spring Break and Easter Break No Classes 3/25-4/2	
3	4/4/13- 4/10/13	Properties of the Earth (Dirt, Rocks and Air) Book Review	Book Review Assignment due Thursday 4/11 at 10pm
4	04/11/13- 4/17/13	Objects in the Sky Activity Review	Activity Review Assignment due Thursday 4/18 at 10pm
5	04/18/13- 4/24/13	Objects in the Sky Book Review	Book Review Assignment due Thursday 4/25 at 10pm
6	04/25/13- 5/1/13	Changes in the Earth and Sky Book Review	Book Review Assignment due Thursday 5/2 at 10pm
7 and 8	5/2/13- 5/10/13	Changes in the Earth and Sky Final Assignment (Develop your own lesson plan/activity)	Final Due on Friday May 10 at Noon.

COURSE EXPECTATIONS

- Evaluation criteria

Weekly/Unit Assignment: Each weekly assignment will be administered on LancerNet. Often you will complete an experiment and following the experiment you will complete an Activity Review for the experiment. Some weeks you will be finding and reviewing children's books that relate to the topic at hand. You will need to visit the library or a bookstore to complete those activities. To access assignments click on the "My Course Content" tool and then open the folder for the week you are working on. These assignments **MUST** be submitted electronically. These assignments are usually due on Thursday at 10pm (see schedule for details). Each Activity Review will be worth 20 points. Each book review will be worth 15 points.

Weekly Discussion: There will be 6 weekly discussions. You will need to make 1 original contribution to each discussion, as well as 1 reply to another student's post each discussion. The focus of each week's discussion will be common student misconceptions about the topic covered for the week. Take a look at the message board to see the beginning and end dates for each discussion. Each discussion is worth 10 pts. Points will be deducted for spelling errors and poor grammar!

Article Review: Students will find an article from a primary literature source that relates to recognizing and/or understanding the elementary student's misconceptions about physical science. The student will submit a copy of the article as well as a 1-2 page article review which includes a summary of the pertinent information from the article as well as the student's reaction to what they have learned in the article. This assignment will be worth 25 points.

Final Assignment. You will develop your own lesson plan which includes an experiment/activity for the topic of changes in the earth and sky. More details and criteria will be made available in plenty of time for you to complete the assignment. This assignment will be due on Friday May 10 at noon and is worth 50 points.

- Grading Scale and Criteria
 - 2 Activity Review Assignments @ 20 points each 40 points
 - 3 Children's Book Reviews @ 15 points each 45 points
 - 1 Article review @ 25 points 25 points
 - 6 Discussion Topics @ 10 points each 60 points
 - 1 Final Assignment 50 points
 - 220 points

- A standard grading scale will be used so:

<i>A = 90-100%</i>	<i>or</i>	<i>198-220</i>	<i>points</i>
<i>B = 80-89.5%</i>	<i>or</i>	<i>176-197.5</i>	<i>points</i>
<i>C = 70-79.5%</i>	<i>or</i>	<i>154-175.5</i>	<i>points</i>
<i>D = 60-69.5%</i>	<i>or</i>	<i>132-153.5</i>	<i>points</i>
<i>F = Below 60%</i>	<i>or</i>	<i>Below 132</i>	<i>points</i>

Policies and Expectations

- Exhibit positive attitudes towards science and the topics that lie within the course.
- **Proper grammar and spelling count on all assignments, including discussions. When you become a teacher you will need to model proper grammar and spelling to students, so now is the time to start practicing!** Points will be deducted from your grade for spelling and grammar mistakes.
- Late work will **NOT** be accepted in this course.
- Any form of academic dishonesty will NOT be tolerated. This includes cheating on anyr assignments and plagiarism. Plagiarism is copying or using the ideas of another individual without giving that individual proper credit. This does include copying work from other students. If it is obvious that a student has violated any of the above, all students involved will receive 0 credit for the assignment or the quiz. The matter may also be submitted to the Dean of Students for further action.
- Carefully read and follow any safety procedures for the activities you will complete.

GENERAL EDUCATION REQUIREMENTS

Communication Skills: Graduates will be able to understand and communicate ideas and information in written and spoken English that reveals a mastery of terminology appropriate to their disciplines.

Analytical and Quantitative Reasoning: Graduates will be able to solve problems through critical thinking involving analytical and quantitative reasoning at a level appropriate to their disciplines.

Technology Skills: Graduates will be able to demonstrate competence using technology appropriate to their disciplines.

Social Awareness: Graduates will be able to demonstrate an awareness of the relationship between the individual and the world.

Information Literacy: Graduates will be able to locate, evaluate, and use information effectively.

ACCOMMODATION STATEMENT

ADA Accommodations:

Eastern Wyoming College is committed to providing reasonable accommodations for qualified individuals with disabilities. If a student has a disability and desires a reasonable accommodation for

such disability, the student should contact Mrs. Debra Ochsner (532-8238) or Mr. Tom McDowell (532-8330) as soon as possible so that arrangements may be made.

DISCLAIMER STATEMENT

Information contained in this syllabus is, to the best knowledge of the instructor, correct and complete when distributed for use at the beginning of the course. However, this syllabus should not be considered a contract between Eastern Wyoming College and the student. The instructor reserves the right, acting within the policies and procedures of EWC, to make changes in course materials and course schedules.