Environmental Geology -Geol 1470
Fall 2013

Course Information
Lecture: Geol 1470 40 – Internet Delivery
Laboratory: Geol 1470 40 – Internet Delivery
Credit Hours: 4.0

Instructor Information
Coventry Dougherty-Woodin
Office phone: 307.358.5622 Email: coventry.dougherty@ewc.wy.edu
Office Hours: M/W 9:00-10:00 am, T 2:30 – 4:00 pm or by appointment
Instructor availability specific for this course: T/Th 1:00 – 2:30 am, W 1:00 – 4:00

Course Content Information
Catalog Description:
This course is an application of geologic principles to topical problems in environmental and resource geology. Topics include analysis of environmental issues such as earthquake disaster preparedness, landslides, land use, floods and human occupation, ground water withdrawal and contamination issues, volcanic and coastal hazards, and the response of landscapes and people to resource development (minerals/air/water/energy). Laboratories will be used to analyze and debate data relevant to environmental problems from a geological perspective.
Laboratory is **REQUIRED**. 3 hours lecture, 3 hours lab.

Introduction, Rationale & Objectives:
This course is designed to introduce you to our natural environment and the human interactions and everyday problems with our environment and global community from a geological perspective. Topics to be covered will include: Earth Materials and Structure, Human Population Growth, Environmental Hazards such as Floods and Earthquakes, Pollution of the Environment, Waste Disposal natural Resources, and Energy Sources and their exploitation.

Other objectives include: development of greater self-awareness of your personal role regarding environmental issues; increased awareness of environmental issues and how they affect society; development of skills and insight into critical thinking and situational awareness of your surrounding environment; gain an understanding of the physical processes that operate in and on Earth; understand the interactions between humans and these geological processes; and understand past, present and future environmental issues and how they affect the Earth and our society. Let the quest begin! **Above all, remember that geology is a fun, exciting adventure!**
Geol 1470 will fulfill the general education category of Lab Science for the Associate of Arts and Associate of Science Degree.

Required Textbooks & Resources:
Lecture Textbook: Living With Earth; Hudson, Travis (1st ed); ISBN 978-0-13-142447-0
Laboratory Manual: There is no lab manual required for this course. I will provide the information necessary to complete laboratory assignments.

The above material will be supplemented through Lecture Notes.
LancerNet: http://prod.campuscruiser.com/PageServlet?pg=home_welcome&cx=22.327
Your textbook's website: www.mygeoscienceplace.com

Additional Resources:
I often find that just reading the text and actively participating in lecture and lab are not enough for me to grasp a new concept. With this in mind, I am providing some web resources that have been useful to me throughout my academic career in science!
A science dictionary: http://www.biology-online.org/dictionary
Study tips: http://abacus.bates.edu/~ganderso/biology/resources/studytips.html
SmarThinking: This is an online resource that connects students with professional educators. This resource has online tutoring, writing services, and homework help. Tutors are available up to 24 hours a day, 7 days a week in a variety of subjects. This service is free to all EWC students.

Course Requirements and Expectations:
Grading Policy:
Unless otherwise stated, grades will be posted on LancerNet within one full week of the assignment due date. Points are earned as follows:

ITEM	POINTS POSSIBLE
RAM Quizzes: 12 @ 10 pts each	120
Proficiencies: 4 @ 100 pts each	400
Research Paper: 2 @ 100 pts	200
Lab Assignments: 13 @ 20 pts each	260
Weekly Discussions: 15 @ 10 pts each	150
Total Possible Points	1130

****NOTE: THERE IS ABSOLUTELY NO EXTRA CREDIT OFFERED IN THIS COURSE! IF YOU HAVE TIME TO DO EXTRA CREDIT, YOU HAVE TIME TO STUDY!**

Your grade will then be determined according to the following scale:
1017 - 1130 points (90 – 100%) = A
904 - 1016 points (80 – 89%) = B
791 - 903 points (70 – 79%) = C
678 - 790 points (60 – 69%) = D
000 - 677 points (0 – 59%) = F

What to Expect From:
Course Work & Preparation Time:
This may be your first college science course. As such, you may have some preconceived notions. "Science is hard!" "I feel like I am learning a new language." Both of these statements are true; however, you can master this course as well as any other course through your amount of effort. A general guideline for estimating study time, particularly in science courses, is two to three hours of preparation for each lecture/lab hour. This translates to 60 lecture/lab hours and

120 to 180 hours of preparation/study. Successful students (C or better) spend roughly eight to 12 hours per week **ACTIVELY** preparing for this course. What does **ACTIVELY** mean? This is a great question. **ACTIVELY** means: 1. reading the assigned text (underlining/highlighting important sections, maintaining a list of unfamiliar words, making outlines or concept maps, making connections between assigned readings and previously studied topics); 2. participation (note taking, asking/answering questions, participation in discussion, asking for clarification of concepts); 3. memorizing/analyzing/integrating terms and concepts in your individual study time (drawing pictures, devising clever memory hooks, verbally reciting concepts, working sample problems, etc.). You may think that you are not cut out for learning biology. This is nonsense! You can all learn biology, and I will do everything I can to help!

This may also be your first experience participating in a class using an online setting. You may have some preconceived notions regarding this as well. However, it is as imperative as it would be if you were attending lecture and lab on campus that you keep up with the material. Yes, you are working at your own pace, but do not let this turn you into a procrastinator. You will fall behind quickly if you "put off until tomorrow what you can do today". You need to set time aside to focus, participate & study to succeed in this course. Doing so will eliminate undue stress!

Attendance:
Regular attendance and steady progress are essential to success in this course. Keep in mind that you are expected to spend *at least* 6 hours per week on this class; however, this will be done on your own schedule since this course is online. Some of you may need to spend more time than this to “grasp” the material. If you were taking this class on campus, you would be coming to class 3 hours per week for lecture and 3 hours per week for labs. You do need to adhere to due dates for proficiencies, RAMs and assignments, so log in frequently to keep up to date.

While You Are Studying (WYAS):
Think of WYAS as a study guide. It does **NOT** need to be turned in to me, so it is at your discretion as to whether or not you choose to use it. Quite simply, it is meant to give you guidance and direction for concepts you grasp vs. those you do not, i.e., "Did you get it"? You should be able to answer each of the questions after completing the chapters.

Quests and Missions:
This course is divided into four different quests. Each quest is comprised of a number of different missions designed to enhance your learning of the particular chapters within the quest. Missions will consist of both mandatory and optional activities for you to complete to help retain and maintain the information necessary to successfully navigate this course.

Retain And Maintain (RAM) Proficiencies:
Each week, you will be given a small proficiency to test your retention of the material from the previous week. This policy of having small proficiencies each week is intended for you to keep up your progress over the semester, and hopefully will ease your stress a bit by putting less pressure on you to excel on only Quest and Course proficiencies. Some of the RAM questions will be multiple choice, some will be activities. RAMs are intended to encourage you to keep up with the material (maintain) and to encourage study techniques that will make you successful in

this class and beyond (retain). **Your grade will be based on the best 12 out of 14 RAMs collected**. Because your two lowest scores will be dropped**, RAMs cannot be made up.** Each RAM is worth 10 points, for a total of 120 points.

Quest Proficiencies:
There will be four Quest Proficiencies in this course. These proficiencies are listed in the "Tentative Lecture Schedule". Make note of these dates and times so you can adequately prepare. These proficiencies must be completed within the allotted time. The proficiencies will have questions based on the posted notes & the text. There will be a variety of question types including: multiple choice, matching, fill-in-the-blank and essay. Some questions will be rather straightforward in an effort to test your knowledge of the terminology, while others will require you to apply the concepts or solve problems based on the information you have learned. There will be practice quizzes and other resources available from the textbook publisher's website: www.mygeoscienceplace.com. These are great practice as you prepare for your proficiencies. I will also try to make other links available to provide additional information to help you study.

Proficiency Make-up Policy:
Each proficiency takes hours to craft, balancing simple questions with more challenging problems. A make-up requires that a new proficiency be created, one completely equal, but totally different than the one your classmates received. If you should miss one of the scheduled proficiency, be aware that I rarely schedule make-up proficiency. To qualify for a make-up proficiency, you have been: hospitalized, have a doctor's written documentation for an illness that **you** personally suffer, or there is a death of an immediate family member. In addition, you **must** contact me within 24h of the proficiency (preferably before, not after), or you will not be able to make up the proficiency. If it is decided that you can take a make-up proficiency, that proficiency must be taken prior to the results of that proficiency are returned to the general class. If this does not occur, you must make up the proficiency during finals week. While a reliable internet connection is vital for success in this course, it is especially important that you have a reliable internet connection during RAM & proficiency time. You may want to take your proficiencies at your local Outreach center to ensure uninterrupted internet service. Should your internet connection fail you during exam time, you will not be allowed to finish or make up the proficiency. **In the event of a complete EWC server failure, please notify me via email immediately.**

Lab Assignments:
There will be 12 lab assignments in this class. The first lab assignment will be for bonus points, while the subsequent 11 are required and must be submitted by their due dates. Once again, please check the schedule to see when the labs will need to be completed as missing two or more labs constitutes failure of the course. Each lab assignment is worth 20 points.

Lab Make-up Policy:
There are no make-ups for lab assignments. Please make sure you adhere to the due dates as failure to submit more than two labs will result in failure of this course (this is a lab science).

*Weekly Discussion***:**
Each week there will be a new discussion topic/question posted on LancerNet. You will receive

credit for each assigned discussion topic/question that you respond to. Please see the description of this assignment for more information about response criteria. There will be a total of 150 points possible for the discussion assignments this semester. I would like to think that each of us value the opinions, thoughts and comments of others. Therefore, in order to receive full credit each week, you must post your own answer and respond to at least two other posts within one week of the topic post.

Research Papers:
Please refer to additional documentation for information and guidelines regarding your research papers.

Late Assignments & Extra Credit:
All assignments are due on their assigned dates and times. **Late assignments will not be accepted.** There is absolutely **NO** extra credit offered in this course. If you have time to do extra credit, you have time to study. I do however, offer bonus points on discussions and labs. In these cases, your performance is well beyond expectations! For many folks, these bonus points have increased their grade by one full letter!

Withdrawal Policy:
You may withdraw from the course with a grade of "W" (withdrawal); however, the decision must be made and the procedure accomplished ON OR BEFORE the College's official last day to drop classes (November 26, 2013). If the procedure is not completed before this day, you will receive a grade of "F". This is your responsibility.

After the College's official last day to drop classes, you cannot receive a "W" (withdrawal) for the course, except for very extenuating circumstances (serious illness, hospitalization, etc.).

Exceptions that do not count as an absence:
1. Prolonged illness (hospital, etc.)
2. Death in immediate family
3. School activities and trips (team sports, class field trips, etc.). The student must tell the instructor before the absence.

NOTE: ** The instructor reserves the right to verify extenuating circumstances.

Academic Integrity and Class Conduct:
I consider the act of Academic Dishonesty to be unethical behavior! Academic dishonesty (examples include, but are not limited to: cheating, plagiarism, copying from your neighbor, taking quizzes/exams in any way but yourself, etc.) will not be tolerated in any form. What constitutes cheating and plagiarism? Another great question! Cheating includes using your textbook, notes, internet resources, sharing answers, having someone else do your work, working together on individual assignments, etc. while completing RAMs, proficiencies and assignments unless otherwise indicated. The act of plagiarism is committed when one copies or uses ideas of another individual without giving that individual proper credit. This does include copying work from other students, copying and pasting information from the internet or taking information directly from your text or lecture notes. If your work is not in your own words, consider it

plagiarism! It is not fair to your classmates, to me, or ultimately to you. Any student who is caught in any of these acts will receive an "**F**" for this course.

Students shall complete all assigned course work individually unless otherwise indicated. In addition, the instructor may refer the student to the appropriate EWC official for further discipline.

Student Expectations:

1. You are expected to spend a minimum of 6 hours per week on this course.
2. You are expected to turn in assignments, exams, and RAMs by the designated due dates.
3. You are expected to read the text book, notes and other materials supplied for the course.
4. You are expected to seek additional help as needed. Contact your instructor, a tutor, or a peer study group to get extra help. Do not wait until it is too late! If you cannot see/contact me during my office hours, schedule an appointment. For lab assignments, **DO NOT** submit any version of the answer, '**I don't understand**'. To me, this suggests that you are not interested in the learning process. Instead, contact me immediately, and I will do everything I can to help you work through the problem.
5. You are expected to respect the ideas of others and exhibit proper online etiquette.
6. You are expected to include the course number (Geol 1470) in the subject line of any email correspondence you send to your instructor.
7. You are expected to include your name and the course number on any lab assignments or attachments that you submit. These assignments and attachments often get separated from your email, so make sure your name is on the assignment or attachment! **I deduct two points for failure to include your name!** You also need to keep a copy of the assignments you submit until you have received your final grade in the course… because things can disappear due to the "gremlins" that exist in cyberspace.
8. It is expected that you know how to communicate with others in writing. This means using proper English, using complete sentences with proper punctuation, no texting-type of abbreviations, and the correct spelling of words. Proof-read your work. **Failure to do so will result in deductions of 0.5 points per infraction with a maximum deduction per assignment of 15 points!**
9. **Science & Religion:** For those of you that are deeply rooted in your faith and religion, realize that I certainly applaud and appreciate your passion and conviction. This course is in no way designed to challenge the root of your faith nor your beliefs. Quite simply, it is designed to introduce you to theories and concepts as well as test your comprehension of those theories and concepts. It is not meant nor designed for you to accept those theories, but rather acknowledge they exist, just as you would acknowledge there is more than one religion. With this in mind, you will not receive credit for answers or assignments that fail to answer the questions based on the presented course content. It is also unacceptable to ask for supplemental questions, assignments or exemptions as a result of religious beliefs.

Disclaimer:

Information contained in this syllabus was, to the best knowledge of the instructor, considered correct and complete when distributed for use at the beginning of class. 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 content or instructional technique without notice or obligation.

Tentative Lecture Schedule – Fall 2013

Week	Dates	Lecture Topic	Assigned Chapter	RAM & Dates
1	**Aug 27-Sept 1**	What does "Living with Earth" mean?	1	Practice RAM: Sept 3
2	**Sept 2-8**	Earth Systems	2	CH 1 & 2: Sept 9
3	**Sept 9-15**	The Dynamic Geosphere & Plate Tectonics	3	CH 3: Sept 16
4	**Sept 16-22**	Geosphere Materials	4	CH 4: Sept 20
Proficiency 1: Chapters 1-4 Available: 8:00 am – 11:55 pm Mon, Sept 23				
5	**Sept 23-29**	Earthquakes	5	CH 5: Sept 30
6	**Sept 30-Oct 6**	Volcanoes	6	CH 6: Oct 7
7	**Oct 7-13**	Rivers and Flooding	7	CH 7: Oct 14
Research Paper 1 Due Noon Wed Oct 16				
8	**Oct 14-20**	Unstable Land	8	CH 8: Oct 18
Proficiency 2: Chapters 5-8 Available: 8:00 am – 11:55 Pm Mon, Oct 21				
9	**Oct 21-27**	Changing Coasts	9	CH 9: Oct 28
10	**Oct 28-Nov 3**	Water Resources	10	CH 10: Nov 4
11	**Nov 4-10**	Soil resources	11	CH 11: Nov 11
12	**Nov 11-17**	Mineral Resources	12	CH 12: Nov 15
Proficiency 3: Chapters 9-12 Available: 8:00 am – 11:55 pm Mon, Nov 18				
13	**Nov 18-24**	Energy Resources	13	CH 13: Nov 25
14	**Nov 25-Dec 1**	Atmosphere Resources and Climate Change	14	CH 14: Dec 2
Research Paper 2 Due Noon Wed Dec 4				
15	**Dec 2-8**	Managing People's Environmental Impact	15	CH 15: Dec 6
Proficiency 4: Chapters 13-15 Available: 8:00 am – 11:55 pm Mon, Dec 9				

Tentative Laboratory Schedule – Fall 2013

Week	Due Dates	Lab Assignment - Due Thursdays @ Noon (12 pm) unless otherwise noted
1	**Aug 29**	No Lab
2	**Sept 5**	Practice Lab
3	**Sept 12**	Lab 1: Maps & Map Reading
4	**Sept 19**	Lab 2: Sedimentary & Metamorphic Rocks
5	**Sept 26**	Lab 3: Earthquakes
6	**Oct 3**	Lab 4: Volcanoes
7	**Oct 10**	Lab 5: Stream & River Flooding
8	**Oct 17**	Lab 6: Landslides
9	**Oct 24**	Lab 7: Shoreline Property & Tsunami/Storms
10	**Oct 31**	Lab 8: Water, A Finite Resource
11	**Nov 7**	Lab 9: Selenium Contamination
12	**Nov 14**	Lab 10: Coal & Energy
13	**Nov 21**	Lab 11: Climate Change
14	**Nov 28**	No Lab – Happy Thanksgiving
15	**Dec 5**	Lab 12: Population Dynamics
16	**Dec 12**	No Lab

General Education Requirements:
The following are the General Education Requirements for all graduates of EWC:
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.

Americans With Disabilities:
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 Debbie Ochsner (532-8238) or Mr. Stuart Nelson (532-8330) as soon as possible so that arrangements may be made.