GEOL 112 (Section C75) – EARTH HISTORY

Summer 2015 – Western Kentucky University

Preliminary Syllabus – Last Updated on 22 April 2015

Instructor: Dr. Jennifer Cole

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*Please note that the instructor for this course will be Dr. Cole

All course correspondence will be conducted through your WKU email and Blackboard. All efforts will be made to respond to student emails within 24 hours. Please note that the instructor may not check email on holidays, weekends, or at night.

Course Description: There are <u>no prerequisites</u> for this course. An introduction to the geologic study of major land, sea, and life patterns throughout geologic time. Topics include the development of geology as a science, nature and significance of the fossil record, basic stratigraphic relations, theories concerning the origin of Earth and the solar system, prehistoric life, paleogeography, and global tectonics.

Course Content Discipline: Geology

Credit Hours: 3

Why Take This Course?

This course satisfies a <u>Category D Science</u> requirement for the <u>old General Education</u> program (students enrolled at WKU prior to the Fall 2014 term). For all new students attending WKU for the first time in Fall 2014 or thereafter, this course is approved in the <u>Explorations - Natural and Physical Sciences (E-NS)</u> category of the <u>Colonnade Program</u>. *Earth History* is required for the <u>Geology Major</u> and <u>Minor</u>. The course is also appropriate for prospective science teachers.

Associated Laboratory: GEOL 114, *Earth History Laboratory*, is a separate 1-credit hour course designed to accompany GEOL 112. Sedimentary rocks, fossil specimens, stratigraphic concepts, and geologic maps are studied. Students electing to meet their general education science laboratory requirement (DL in the old Gen. Ed. program / E-SL in the Colonnade Program) through GEOL 114 should simultaneously enroll in GEOL 112.

Learning Objectives:

As part of the WKU Colonnade Program, students in this class will:

- demonstrate an understanding of the methods of scientific inquiry
- explain the basic concepts and principles in one or more of the sciences
- apply scientific principles to interpret and make prediction
- explain how scientific principles relate to issues of personal and/or public significance

Specific learning objectives for Geology 112 are to:

- address how the scientific method is used to study geological problems
- describe the methods used to establish the relative and absolute ages of geologic events, including their correlation
- explain the techniques used to reconstruct ancient geographies and environments
- identify key events of Earth history in the context of interactions of components in the Earth system
- place current changes in the Earth system, such as climate change and biodiversity loss, in their historic perspective

Textbook (required)

Wicander, R. and Monroe, J.S. Historical Geology. Brooks/Cole Cengage Learning, Belmont, CA.

Many editions of this textbook are available. The most recent is the 8th edition, with a copyright of 2016, and a price tag of \$248! The 7th or 6th editions are perfectly acceptable, and <u>I encourage you to find a used copy</u> of

the book, for example on Amazon or eBay (6th edition is selling for about \$45). Alternatively, you may rent the book or purchase the e-book. The 7th edition of the e-book sells for \$74 here: <u>http://www.cengagebrain.com/</u> <u>shop/isbn/9781111987299</u>. **Please note: the university bookstore <u>may not</u> have copies of this text. You may need to purchase this book elsewhere.**

Special Instructional Materials

A computer with Internet access is <u>required</u> for this online class. All course correspondence, notes, assignments, and exams/quizzes will be conducted through Blackboard (<u>https://blackboard.wku.edu/</u>). Because it is essential that you have access to a computer and the Internet, it is required that you identify at least one backup computer with Internet access in case you have problems with your personal equipment <u>(any equipment or Internet</u> access problems will not be considered a valid excuse for missing assignments). The WKU student computer labs and most public libraries have computers with Internet access.

Minimum Required Technical Skills

In this course, you will be required to use the Internet to access Blackboard and to locate news articles using one of the websites provided. You must be competent with the Blackboard system to navigate through the different components, take quizzes, and post material. Occasional notices concerning this course will also be sent through WKU e-mail. To view the PowerPoint slides and Word documents provided in Content, you will need to have software such as <u>Microsoft Office</u> or <u>OpenOffice</u> installed on your computer, and be able to open the files.

Grading/Evaluation

There will be 11 <u>quizzes</u>, one on each topic covered in this course. The quizzes will be online and administered through Blackboard. There will be no credit given for missed or late quizzes. Your one lowest quiz grade will be dropped, and the remaining 10 quizzes are each worth 8% of the final grade, for a total of 80%.

You will post two <u>news summaries</u> of recent news items relevant to Earth's history. More details and an example of these assignments will be available on Blackboard. Each news summary will be worth 5% of your final grade, for a total of 10%. Additionally, you must <u>comment</u> on your fellow students' news summaries. These comments can include questions about the topic presented in the news summaries, connections made between the news article and material covered in our text, or descriptions of additional information you have found on the Internet (a simple url link to another website is not sufficient). To receive full credit you must comment on a minimum of five news summaries. Comments contribute to 10% of your final grade.

There will be one <u>optional final exam</u>, covering all material from the semester. The exam will be composed of short essay questions. The final exam will be online and administered through Blackboard. There will be no credit given for a missed or late exam. The optional and cumulative final exam will replace <u>one</u> of your lowest quiz grades. If none of your quiz grades are lower than your final exam score, you will not be penalized. There will be no other assignments or extra credit opportunities for this course.

Your grades on all work will be based on the following ranges: $A \ge 90\%$, B = 80-89%, C = 70-79%, D = 60-69%, $F \le 59\%$

University Deadlines and Schedule Change Policy

The Department of Geography and Geology strictly adheres to University policies regarding schedule changes. It is the responsibility of the student to meet all deadlines for drop/add etc. Only in exceptional cases will a deadline be waived (you would be required to fill out an appeal form). The form requires a written description of the extenuating circumstances involved and the attachment of appropriate documentation. Poor academic performance, general malaise, or undocumented general stress factors are not considered legitimate circumstances. The Summer 2015 academic calendar, with add/drop dates, can be accessed at: http://www.wku.edu/registrar/academic_calendars/documents/summer_academic_calendar2015.pdf

Student Behavior and Communications

Students are expected to assist in maintaining an online environment that is conducive to learning. All course communications are limited to the subject material of the course and are monitored by the instructor. Inappropriate online behavior with the instructor or any student shall result, minimally, in a request to leave class. All incidents of inappropriate behavior will be reported to the Department Head and the Dean of Ogden College. Students should also report inappropriate online behavior to the instructor.

Students with Disabilities

Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Student Accessibility Resource Center, DSU 1074. The SARC telephone number is (270) 745-5004; TDD is 745-3030. Please do not request accommodations directly without a letter of accommodation from SARC. Their website is: <u>https://www.wku.edu/sarc/</u>

Privacy Policy and Internet Security

The course will be conducted online through Blackboard. Your WKU NET ID and password will give you access to Blackboard and provide a measure of privacy protection of the course content and your grades. Do not share your ID or password with anyone. If using a public computer (for example, at a hotel or library), you must log out and completely close the browser software when finished. This will prevent another person from accessing the course using your identification, doing mischief in your name, and violating the privacy of other students. You are expected to represent your identity in a truthful manner. Falsifying your identity is grounds for disciplinary action of all parties involved.

Proposed Course Schedule

The instructor reserves the right to make changes to the course schedule. Such changes will be promptly communicated with students by email.

| Week | | Торіс | Reading | Complete Quiz By |
|------|---|--|------------------|-----------------------|
| 1 | М | First day of classes, July 6 | | |
| | Т | 1. Introduction | Chapters 1 & 2 | July 7, 11pm Central |
| | R | 2. Plate Tectonics & Geologic Time | Chapters 3 & 4 | July 9, 11pm Central |
| | S | 3. Geologic Record & Sed. Rocks | Chapters 5 & 6 | July 12, 11pm Central |
| 2 | Т | 4. Evolution | Chapter 7 | July 14, 11pm Central |
| | | First news summary due by July 14, 11pm Central | | |
| | R | 5. Precambrian | Chapters 8 & 9 | July 16, 11pm Central |
| | S | 6. Paleozoic Events | Chapters 10 & 11 | July19, 11pm Central |
| 3 | Т | 7. Paleozoic Life | Chapters 12 & 13 | July 21, 11pm Central |
| | R | 8. Mesozoic Events | Chapter 14 | July 23, 11pm Central |
| | S | 9. Mesozoic Life | Chapter 15 | July 26, 11pm Central |
| | 3 | Second news summary due by July 26, 11pm Central | | |
| 4 | Т | 10. Cenozoic Events | Chapters 16 & 17 | July 28, 11pm Central |
| | R | 11. Cenozoic Life | Chapters 18 & 19 | July 30, 11pm Central |
| | F | Optional final exam due by July 31, 11pm Central | | |