**Geology 201: Geology of Our National Parks and Monuments**

**Spring 2019**

Instructor: Lori Snyder

Office P153; 836-5086; e-mail: [snyderld@uwec.edu](mailto:snyderld@uwec.edu)

Office Hours: Monday 1:00-3:00, Tuesday 11:00-12:00 and Friday 10:00-12:00 AND by appointment or drop-in

Text: Reynolds, Johnson, Morin, and Carter, 2013, Exploring Geology, 3rd Ed.

Additional reading may be assigned

Percent of Final Grade

Grading: Exams 40

Canvas Quizzes (one low score dropped) 25

Canvas Assignments (one low score dropped) 20

iClicker Responses/Attendance\* (3 low scores dropped) 15

***\*Greater than 5 unexcused absences during the semester will result in a failing grade for the course* \***

*Grading Scale*

*90-100% = A*

*80-90% = B*

*70-80% = C*

*60-70% = D*

*<60% = F* “+” and “-“ will also be applied

**Tentative Schedule:**

Week Date Topic “Exploring Geology” and other Readings

1 2/5 Course Overview-The National Park System [History and Information](http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-BCK-ORRG_National%20Park%20System.pdf)

2/7 Earth Materials 4.1 – 4.2, 4.6, 4.11 – 4.13

2 2/12 Earth’s Interior/Plate Tectonics 1.3, 4.10, 12.5, 12.15, 12.16, Chap 3

2/14 Plate Tectonics Chap 3, 10.3 – 10.6

3 2/19 Geologic Time 2.6, 9.1 – 9.4, 9.8

2/21 Geologic Time 9.12

4 2/26 Igneous Rocks and Volcanism Chap 5, Chap 6

2/28 **EXAM #1**

5 3/5 Oceanic Hotspot: Hawaii Volcanoes NP Hawaii Volcanoes Reading

3/7 Oceanic Hotspot: Hawaii Volcanoes NP

6 3/12 Volcanic Arcs: Cascade Range Mt St Helens Reading

3/14 Volcanic Arcs: Cascade Range 6.14, Mount Rainier Reading

73/19 Continental Hotspot: Yellowstone NP 2.7D, 6.11, 11.7, Yellowstone Reading

3/21 Sedimentary Rock Environments Chap 7

\*\*\*\*\*\*SPRING BREAK\*\*\*\*\*\*

8 4/2 The Colorado Plateau Colorado Plateau Reading 4/4 Paleozoic: Grand Canyon NP Grand Canyon Reading

9 4/9 Mesozoic: Zion NP; Arches NP Zion and Arches Reading

4/11 Cenozoic: Bryce Canyon NP Bryce Canyon Reading

10 4/16 **EXAM #2**

4/18 Fossils/Erosion: Badlands NP 9.5, Badlands Reading

11 4/23 Modern Passive Margin: Everglades

4/25 Reefs: Guadalupe Mountains NP; Biscayne Bay NP Guadalupe Mountains Reading

12 4/30 Groundwater and Caves:

Carlsbad Caverns NP/Mammoth Cave NP 17.6, Carlsbad and Mammoth Reading

5/2 Mountains, Climate, and Glaciers 8.1 – 8.5, 11.2-11.4

13 5/7Basin and Range: Death Valley NP Basin and Range Reading

5/9 West Coast Mountains: Yosemite NP/ Olympic NP Yosemite Reading; Olympic Reading

14 5/14 Rocky Mountains:

Glacier-Waterton International Peace Park/Grand Teton NP Glacier Reading; Grand Teton Reading

5/16 Alaska: Denali NP/Wrangell-St. Elias NP

5/23 **EXAM #3** Section 001 (9:30-10:20 meeting time) Phillips Hall 276 at 10:00am

Section 002 (1:00-1:50 meeting time) Phillips Hall 007 at 1:00pm

**University/Course Policies and Additional Information**

***University Policy requires that instructors maintain attendance records***. Attendance records for Geology 201 are maintained through in-class use of the iClicker Cloud Polling System.

***\*Greater than 5 unexcused absences during the semester will result in a failing grade for the course***

***University Policy requires that course syllabi include a statement that informs students about the availability of the*** [***Services for Students with Disabilities Office***](http://www.uwec.edu/ssd/index.htm)**.** Any student enrolled in Geology 201 who has a disability and requests classroom accommodations should contact the instructor and the Services for Students with Disabilities Office in Centennial Hall 2106 at the beginning of the semester.

***University Policy requires that course syllabi include a prescribed statement on the Liberal Education Core Curriculum*.**

The UW-Eau Claire Liberal Education (LE) Core curriculum serves as a strong foundation for all our academic programs. Our LE Core embodies the Power of [AND] in its design. It has been developed to ensure that you acquire the ***knowledge* AND *skills* AND *responsibility*** that you will need to actively engage in a global society. Through meeting the requirements of the LE Core you will develop the ability to think critically, creatively and independently. You will learn to integrate and apply your knowledge and develop values essential to becoming a constructive global citizen. The outcomes will empower you and prepare you to deal with complexity, diversity, and change in multiple settings. They will also develop highly marketable skills and lead to life-long learning and civic engagement (see <https://www.uwec.edu/ULEC/Liberal-Education-Framework-Learning-Outcome-and-Rubrics.htm>).

Geology 201 focuses directly on the K1 Knowledge and R3 Responsibility outcomes**.**

Knowledge Outcome 1 (K1): Natural Sciences. Describe and evaluate models of the natural and physical world through collection and scientific analysis of data, and through the use of mathematical or computational methods.

Responsibility Outcome 3 (R3): Civic and Environmental Issues. Use critical and creative thinking to address civic, social, and environmental challenges.

These outcomes will be assessed through iClicker questions, quizzes, assignments and exams.

***University Policy encourages instructors to inform students of the Policies regarding*** [***Academic Misconduct***](https://www.uwec.edu/kb/article/blugold-student-conduct-code/). I consider any academic misconduct in this course as a serious offense, and I will pursue the strongest possible academic penalties for such behavior. Information specific to GEOL 201:

* Online Canvas quizzes, assignments, and the individual portion of the exams are to be completed **individually.**
* **Collaboration** on iClicker questions and on the collaborative portion of the lecture exams is encouraged.
* **Giving your i>Clicker to someone else to use in your absence will result in the loss of all clicker points for both individuals for the entire semester. Answering iClicker questions while outside in the classroom is not allowed and will result in a loss of all clicker points for the semester.**

An [***Academic Calendar***](https://www.uwec.edu/Registrar/calendar/upload/REVISEDAcademicRegistrationCalendar2018_2019.pdf) for the 2018-2019 year. Important University deadlines include:

2/8 Last day to register for courses

2/15 Last day to drop course with no record

4/19 Last day to withdraw from courses

**Course Behavior/Expectations**

Images used on class are subject to copyright and may not be used outside of the classroom setting or posted online.

Your behavior should reflect respect to all members of the course at all times. Please be on time to class and ready to engage and participate.

Personal Electronic Devices:

* **Studies have shown that when a student engages in non-classroom activities on their laptops, the grades of the students AROUND them suffer a reduction of about 1/3 of a grade. Please be mindful of your potential to negatively impact those around you!**
* Laptops may ONLY be used to take notes.
* Cell phones may be used ONLY to answer iClicker Polling Questions. Violation of these policies through gaming, texting and/or social media interaction will result in disciplinary action that may include a reduction in course grade, expulsion from the classroom or a referral for disciplinary action to the Dean of Students or the College of Arts and Sciences.

In reciprocation, I will strive to be respectful of all students, begin and end class on time and foster an open and accepting environment.

Violation of university or course policies will result in disciplinary action and may include a reduction in course grade, expulsion from the classroom or referral to the Dean of Students.

**Assessment Components**

*Attendance/iClicker Responses (15 % of final grade)*

Nearly every lecture you will be asked to participate in the class using the iClicker Cloud Polling System. It is your responsibility to come prepared to participate with a functioning device every lecture.

***\*Greater than 5 unexcused absences during the semester will result in a failing grade for the course***

Excused absences include any University sponsored activity such as music, athletics or course field trips. Please e-mail me your form; it is your responsibility to obtain this form from the sponsoring unit or department. I will also consider some other life events as excused absences on an individual basis. Excused absences DO NOT include oversleeping or forgetting class, or minor illnesses.

Your 3 lowest iClicker scores in addition to excused absences will be dropped when calculating final scores for this assessment item.

**All Excused absences should be reported to me via e-mail and must contain**

**Your Name**

**Your Section (section 001 meets at 9:30am and section 002 meets at 1:00pm)**

**Documentation of University sponsored Activity (this is a form sent to you; just forward it to me)**

**Note: If a hard copy of the activity form is presented to me, I still require an e-mail notification!**

**Note: It is not necessary to inform me of your unexcused absences (All students are allowed three (3) unexcused absences during the semester. If you have a prolonged illness or another life event that causes you to miss multiple class periods, please contact me or the Dean of Students Office so that we can work out alternate arrangements!)**

iClicker points will be assigned on the following basis:

One point for each question answered. Question points are assigned as follows:

0.75 points for answering the question

0.25 points for a correct answer

iClicker questions will be based on general pre-existing knowledge, course lecture material and course readings. Approximately 3-5 questions per day will be answered and these will occur at random times during the lecture period. Every two weeks, your clicker scores will uploaded and posted on Canvas, but you can view them in iClicker Cloud immediately.

*Canvas Quizzes (25% of final grade)*

Quizzes will be taken outside of class time and will be announced in class and on the course Canvas site. They will consist of 10 multiple choice questions and you will have 20 minutes to complete the quiz. These quizzes are to be completed **INDIVIDUALLY**.

**The quizzes will be open in Canvas for four to five (4-5) days and you will receive two reminders to complete the quiz. Quizzes WILL NOT be reopened once they are closed except under exceptional circumstances!**

Your lowest quiz score will be dropped when calculating final scores for this assessment item.

*Assignments (20% of final grade)*

During the course of the semester, short assignments will be completed. These will be announced in lecture and on Canvas with instructions and deadlines.

Your lowest assignment score will be dropped when calculating final scores for this assessment item.

*Exams (40% of final grade)*

There will be three exams given during the semester. Each exam will be worth 60 points and cover the material from that section. No notes or internet access is allowed during exams. The third exam is NOT cumulative. Exams will be done in two stages. You will take the exam in the traditional manner during the first half of the class. Then, you will take the exam a second time allowing discussions with other students in the class. Exams are weighted 75% for individual effort and 25% for collaborative effort. If you know you will be missing an exam for an official reason, please see me at least a week in advance and we will make alternate arrangements. It is in your best interest to **NOT** miss an exam.