

## UNIVERSITY OF CALGARY FACULTY OF SCIENCE DEPARTMENT OF GEOSCIENCE COURSE OUTLINE WINTER 2015

1. Course: Geology 209, Introduction to Geology

Lecture Sections:

L01: MoWeFr, 12:00-12:50, MFH 162

Instructor, Dr. A. Hildebrand Office ES 760A, Tel. No. 403-220-2291, e-mail address, ahildebr@ucalgary.ca,

Office Hours: TuWed 2:00 - 3:00 PM

L02: TuTh, 15:30-16:45, ST 140

Instructor, Dr. A. Dutchak, Office, ES 240, Tel. No. 403-210-6117, e-mail address, <a href="mailto:alexander.dutchak@ucalgary.ca">alexander.dutchak@ucalgary.ca</a>, Office Hours: by appointment

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Course will use Desire 2 Learn (D2L)

Geoscience Department ES 118, 403-220-5841, geoscience.ucalgary.ca, geoscience@ucalgary.ca

2. Prerequisites: N/A

**Antirequisite:** Credit for both Geology 209 and 201 will not be allowed. See section 3.5.C in the Faculty of Science section of the online Calendar (www.ucalgary.ca/pubs/calendar/current/sc-3-5.html)

**Note:** Not open for credit to Honours, Majors or Minors in Geology, Geology (Petroleum Geology Concentration), Applied and Environmental Geology, Geophysics, Environmental Science (Geology Concentration) or Natural Sciences (Geoscience Concentration).

**3. Grading:** The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Lecture 01	Midterm test 1 Midterm test 2 Final Examination Top Hat	30%	(Feb. 6) (Mar. 16) (To be scheduled by the Registrar)
Lecture 02	Midterm test 1 Midterm test 2 Final Examination Top Hat	30%	(Feb. 12) (Mar. 19) (To be scheduled by the Registrar)

The midterms and final examination will be multiple choice format. No supplemental work may be done to change a grade. Students may opt out of Top Hat participation and add the 5% course credit to their final examination component; students wishing to opt out must inform instructors in writing before the end of first week of class (before 5 PM MST Friday, January 16, 2015)

Grading Scheme (letter and percent): A+ (95-100), A (90-94.99), A- (85-89.99), B+ (80-84.99), B (75-79.99), B- (70-74.99), C+ (65-69.99), C (61-64.99), C- (57-60.99), D+ (53-56.99), D (50-52.99), F (0-49.99)

- **4. Missed Components of Term Work:** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in Section 3.6. It is the student's responsibility to familiarize himself/herself with these regulations. See also Section E.6 of the University Calendar
- 5. Scheduled out-of-class activities: Dates and times of approved class activities held outside of class hours.

**REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY.** If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.

6. Course Materials: Required Text: Essentials of Geology, 4<sup>th</sup> edition by Stephen Marshak

7. Examination Policy: Nonprogrammable calculators are allowed during midterms and final examination. Students should also read the Calendar, Section G, on Examinations.

## 8. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) Misconduct: Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under Section K. Student Misconduct to inform yourself of definitions, processes and penalties.
- (b) Assembly Points: In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points.
- (c) Academic Accommodation Policy: Students with documentable disabilities are referred to the following links: Students with Disabilities: <a href="http://www.ucalgary.ca/pubs/calendar/current/b-1.html">http://www.ucalgary.ca/pubs/calendar/current/b-1.html</a> B.1 and Student Accessibility Services: <a href="http://www.ucalgary.ca/access/">http://www.ucalgary.ca/access/</a>.
- (d) Safewalk: Campus Security will escort individuals day or night (http://www.ucalgary.ca/security/safewalk/). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) Freedom of Information and Privacy: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also <a href="http://www.ucalgary.ca/secretariat/privacy">http://www.ucalgary.ca/secretariat/privacy</a>.
- (f) Student Union Information: VP Academic Phone: 220-3911 Email: suvpaca@ucagary.ca. SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca; Student Ombudsman
- (g) Internet and Electronic Device Information: You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- (h) U.S.R.I.: At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference – please participate in USRI Surveys.

Department Approval: Original Signed Date: December 22, 2014

## GLGY 209 - Section 1 - Topic Outline

Week	Topics	Readings		
1	Introduction, Prelude, Earth Origin, Plate Tectonics	Prelude, Ch. 1, 2		
2	Earth Interior, Earth History	Interlude D, Ch. 11		
3	Crustal Deformation, Earthquakes	Ch. 8, 9		
4	Volcanic Eruptions/ <b>First midterm - Feb. 6</b>	Ch. 5		
5	Minerals and Igneous Rocks	Ch. 3, 4		
Reading Week (Feb 15-22)				
6	Sed. Rocks, Metamorphism	Ch. 6 and 7		
7	Stratigraphy, Dating, Fossils and Evolution	Ch. 10 and Interlude E		
8	Resources, Mass movements	Ch. 12, 13		
9	Streams/Second Midterm - Mar. 16	Ch. 14		
10	Ocean, Hurricanes	Ch. 15		
11	Groundwater, Deserts	Ch. 16, 17		
12	Glaciers, Earth Systems	Ch. 18, 19		
13	Review			

## GLGY 209 - Section 2 - Topic Outline

Week	Topics	Readings		
1	Introduction, Science, Geology, Geologic Time	Ch. 1 and 10		
2	Alfred Wegener and Plate Tectonics	Ch. 2		
3	Minerals, Rocks and Rock Cycle	Ch. 3 and Interludes A and C		
4	Igneous rocks and volcanoes	Ch. 4 and 5		
5	Sediments/soils/ Midterm #1 (Feb. 12)	Interlude B		
Reading Week (Feb 15-22)				
6	Sedimentary and Metamorphic Rocks	Ch. 6 and 7		
7	Crustal Deformation and Earthquakes	Ch. 9 and 8		

8	Running water and Groundwater	Ch. 14 and 16
9	Mass Wasting and Midterm #2 (Mar. 19)	Ch. 13
10	Geologic Time, Dating, Earth History	Ch. 10 and 11
11	History of life, Extinctions, Dinosaurs	Ch. 11 and Interlude E
12	Glaciers and Deserts	Ch. 17 and 18
13	Economic Geology	Ch. 12