



UNIVERSITY OF CALGARY
FACULTY OF SCIENCE
DEPARTMENT OF GEOSCIENCE
COURSE OUTLINE
WINTER 2016

1. **Course:** Geology 301, Geology of the Mountain Regions of Western Canada

Lecture Sections:

L01: TuTh, 14:00-15:15, SB 103

Instructor, Dr. J. Cuthbertson, Office ES 520, Tel. No. 403-220-4709, e-mail address, cuthberj@ucalgary.ca,

Office Hours: by appointment

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

2. **Prerequisites:** Geology 201or 209. 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)
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:

Midterm Exam I	25%
Midterm Exam II	35%
Final Exam	40% (To be scheduled by the Registrar)

Letter Grade	Percent
A+	94-100
A	88-94
A-	83-88
B+	78-83
B	73-78
B-	69-73
C+	65-69
C	61-65
C-	56-61
D+	53-56
D	50-53
F	0-50

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. **Course Materials:**

TEXT: Recommended
Handbook of the Canadian Rockies
Gadd, B.
1995
ISBN 0-9692631-1-2
832 pages

The D2L website will be used throughout the course to make announcements and distribute lecture notes, and other supplementary materials. Please check the course website regularly. Students are strongly encouraged to print the necessary materials and bring them to the lectures.

6. **Examination Policy:** Programmable and non-programmable calculators will be allowed for all exams. Students should also read the Calendar, [Section G](#), on Examinations.

7. **Writing across the curriculum statement:** N/A

8. **OTHER IMPORTANT INFORMATION FOR STUDENTS:**

- (a) **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) **Student Accommodations:** Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available at http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf. Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Associate Head of Geoscience, Dr. E.S. Krebs by email krebs@ucalgary.ca or phone 403-220-5850.
- (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 <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **Student Union Information:** VP Academic Phone: 403 220-3911 Email: suvpaca@ucalgary.ca
SU Faculty Rep. Phone: 403 220-3913 Email: science1@su.ucalgary.ca, science2@su.ucalgary.ca and science3@su.ucalgary.ca;
Student Ombuds Office: 403-220-6420 Email: ombuds@ucalgary.ca; <http://ucalgary.ca/provost/students/ombuds>
- (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: January 5 2016

GLGY 301 Lecture Schedule W2016

Week	Date	Topic	Readings (pg # in Gadd)
1	Tuesday Jan 12	Introduction, course logistics, video	
	Thursday Jan 14	Pre-assessment quiz, geology review, Cordillera overview	
2	Tuesday Jan 19	Cordillera overview continued, belts	
	Thursday Jan 21	Uplift of the Cordillera (B. Guest)	
3	Tuesday Jan 26	Southern Rockies (R. Taerum)	26-35, 45-49
	Thursday Jan 28	Southern Rockies (R. Taerum)	55, 73, 139-141
4	Tuesday Feb 2	Omineca Belt, Intermontane Belt	
	Thursday Feb 4	Coast Belt, Insular Belt	
5	Tuesday Feb 9	Sculpting the Cordillera - glaciations	145-152, 159-163
	Thursday Feb 11	Midterm Test #1	
6	Tuesday Feb 16	<i>Reading Days – no class</i>	
	Thursday Feb 18	<i>Reading Days – no class</i>	
7	Tuesday Feb 23	Geologic resources – metals and mining	
	Thursday Feb 25	Geologic resources – fossil fuels (coal, natural gas, oil)	
8	Tuesday March 1	Geologic resources – fossil fuels continued (coal, natural gas, oil)	127-129, 697
	Thursday March 3	Geologic hazards - volcanoes	
9	Tuesday March 8	Geologic hazards - earthquakes	
	Thursday March 10	Geologic hazards - landslides	164-165
10	Tuesday March 15	Vertebrate fossils of the Cordillera (R. Cuthbertson)	
	Thursday March 17	Midterm Test #2	
11	Tuesday March 22	Historic geologic work and mapping of the Cordillera	
	Thursday March 24	Hot Springs of the Cordillera (S. Grasby)	171-175
12	Tuesday March 29	Current research in the Cordillera (M. Hyashi – hydrogeology; D. Pattison – metamorphic history)	
	Thursday March 31	Geology of the Rocky Mountain parks (Kootenay, Yoho, Jasper, Banff, Lake Louise, Waterton)	79-83
13	Tuesday April 5	Geophysics in the Cordillera (D. Eaton)	
	Thursday April 7	Geology of the Calgary area	
14	Tuesday April 12	Concept map, video and review	