



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

1. **Course:** Geology 493, Evolution of Earth Through Life and Time

Lecture Sections:

L01: MoWeFr, 11:00-11:50, ES 162

For a listing of all lab sections corresponding with this course, please see the following link:

[http://geoscience.ucalgary.ca/geoscience\\_info/courses/w16](http://geoscience.ucalgary.ca/geoscience_info/courses/w16)

Instructor, Dr. Alex Dutchak, Office: ES 240, Tel. No. 403-210-6117, e-mail address, [alexander.dutchak@ucalgary.ca](mailto:alexander.dutchak@ucalgary.ca).

Office Hours: by appointment

Geoscience Department ES 118, 403-220-5841, [geoscience.ucalgary.ca](http://geoscience.ucalgary.ca), [geoscience@ucalgary.ca](mailto:geoscience@ucalgary.ca)

2. **Prerequisites:** Geology 337; Geology 343 or 341; Geology 381. 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](http://www.ucalgary.ca/pubs/calendar/current/sc-3-5.html))

**Antirequisites:** Credit for both Geology 493 and 491 will not be allowed.

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 Midterm 1	15% (February 12, 2016)
Lecture Midterm 2	15% (March 18, 2016)
Lecture Final	25% (To be scheduled by the Registrar)
Lab Exam	20%
Lab Presentation	10%
Lab Quizzes	10%
Top Hat	5%

**Students need to successfully complete (obtain >50%) all components (lab and lecture) to get a passing grade.** The midterm exams will be administered in multiple choice and short answer format. 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 15, 2016)

Each piece of work (laboratory report, exam) submitted by the student will be assigned a percentage score. The student's average percentage score for the various components listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade, bearing in mind that an F grade will result if the student does not pass the Final Examination. The conversion between course percentage and letter grade is given below.

Letter Grade	Percent
A+	>92.00
A	86.00-91.99
A-	82.00-85.99
B+	77.00-81.99
B	74.00-76.99
B-	71.00-73.99
C+	67.00-70.99
C	62.00-66.99
C-	58.00-61.99
D+	54.00-57.99
D	50.00-53.99
F	<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:**

Textbook- The Earth Through Time (10<sup>th</sup> ed.) – Harold Levin

-The e-book is highly recommended, as it is much cheaper than the hard copy

6. **Examination Policy:** No electronic or written aids (eg. cell phones, tablets, computers, PDAs, notes, textbooks) will be allowed during writing of any exams. Non-programmable calculators will be permitted to answer quantitative questions on exams, if applicable, and permission to do this will be clearly indicated on the examination paper. Students should also read the Calendar, [Section G](#), on Examinations.

7. **Writing across the curriculum statement:** In this course, the quality of the student's writing will be a factor in the evaluation of exam and quiz responses, and presentation material. See also [Section E.2](#) of the University Calendar.

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](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](mailto: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](mailto:suvpaca@ucalgary.ca)  
SU Faculty Rep. Phone: 403 220-3913 Email: [science1@su.ucalgary.ca](mailto:science1@su.ucalgary.ca), [science2@su.ucalgary.ca](mailto:science2@su.ucalgary.ca) and [science3@su.ucalgary.ca](mailto:science3@su.ucalgary.ca);  
Student Ombuds Office: 403-220-6420 Email: [ombuds@ucalgary.ca](mailto: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](http://www.ucalgary.ca/usri)). Your responses make a difference – please participate in USRI Surveys.

## Course Topic Schedule – GLGY 493 Winter 2016

	Week of	Lectures	Textbook Readings	Labs
1	Jan 11	Introduction: objectives, administration, geologic time, origin of solar system	<u>Ch3</u> : 29-45	No lab
2	Jan 18	Evolution and Taphonomy	<u>Ch6</u> : 125-164	<u>Lab 1</u> : Fossils and Taphonomy
3	Jan 25	Early Earth	<u>Ch8</u> : 216-238	<u>Lab 2</u> : Evolution and Cladistics ( <b>Quiz 1</b> )
4	Feb 1	Origin and evolution of early life (Guest lectures by Dr. Marc Strous)	<u>Ch8</u> : 238-248	<u>Lab 3</u> : ( <b>Quiz 2</b> ) Proterozoic and Early Paleozoic
5	Feb 8	The Proterozoic <b><u>MIDTERM #1: Friday, Feb. 12, in class</u></b>	<u>Ch9</u> : 253-271	<u>Lab 4</u> : ( <b>Quiz 3</b> ) Paleozoic Diversity
6	Feb 15	<b>No Classes – Reading Week</b>		<b>NO LABS</b>
7	Feb 22	The early Paleozoic paleogeography/climate	<u>Ch10</u> : 275-300	<u>Lab 5</u> : ( <b>Quiz 4</b> ) Mesozoic Diversity
8	Feb 29	The late Paleozoic paleogeography/climate	<u>Ch11</u> : 303-332	<u>Lab 6</u> : ( <b>Quiz 5</b> ) Cenozoic Diversity
9	Mar 7	Paleozoic Life	<u>Ch12</u> : 335-381	Presentations I ( <b>Quiz 6</b> )
10	Mar 14	Mesozoic paleogeography/climate <b><u>MIDTERM #2: Friday, Mar. 18, in class</u></b>	<u>Ch13</u> : 386-413	Presentations II
11	Mar 21	Mesozoic Life	<u>Ch14</u> : 417-464	Presentations III
12	Mar 28	Cenozoic paleogeography/climate	<u>Ch15</u> : 470-502	Review Lab
13	Apr 4	Cenozoic Life	<u>Ch16</u> : 505-539	<b>LAB EXAM</b>
14	Apr 11	Current topics in Earth History	TBD	

\*\*\*Please note this schedule is tentative, and subject to change\*\*\*