

UNIVERSITY OF CALGARY
DEPARTMENT OF GEOSCIENCE
COURSE OUTLINE

1. **Course:** GLGY 527, Ore Deposits

Lectures:

MoWeFr, 09:00-09:50, MS 221

Labs:

B01	08:00 – 09:50	Th	ES 002c
B02	11:00 – 13:50	Th	ES 002c
B03	14:00 – 16:50	Th	ES 002c
B04	17:00 – 19:50	Th	ES 002c

Tutorials:

To be arranged with TAs

Instructor:

Dr. Dave (Prof. David RM Pattison), ES154, Tel. No. 403-220-3263, pattison@ucalgary.ca
Office Hours: Open-door policy or by appointment

The course website can be found on blackboard: (<http://blackboard.ucalgary.ca>)

Departmental Office: ES118, 403-220-5184, geosci@ucalgary.ca

2. **Prerequisites:** GLGY 443 (see <http://www.ucalgary.ca/pubs/calendar/current/geology.htm#9728>)

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:

Lab Assignments (11)	40%
Lab final	30% (Th Dec. 5, 2013, ES002c)
Final Examination	30% (To be scheduled by the Registrar)

The lab final will involve examination of minerals, rocks, polished mounts and thin sections. It is an open book exam. The lecture final will consist of written long-answer questions.

Each piece of work (laboratory report, examination) 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. Letter grade conversions are listed below. The Instructor may shift the numerical cut-off levels down, based on how hard the TAs mark, how hard the exams are, etc., but they will not be shifted up.

Letter Grade	Percent	Letter Grade	Percent
A+	90-100	C+	66-68.9
A	82-89.9	C	62-65.9
A-	79-81.9	C-	59-61.9
B+	76-78.9	D+	56-58.9
B	72-75.9	D	50-55.9
B-	69-71.9	F	0-49.9

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:** None

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:

Textbooks: There is no required textbook for this course, although all students should have a set of mineral identification tables for both the hand sample component and reflected light microscopic component (especially) of the course. Your Glgy 311 text (Nesse) is a good start for the first. The books listed below are recommended.

Lab: Spry, P.G. & Gedlinske, B.L., 1987. Tables for the determination of common opaque minerals. *Economic Geology Publishing Co.*, New Haven CT, 52 pp.

New for 2013! The excellent textbook *Craig, J.R. & Vaughan, D.J. (1994) Ore microscopy and ore petrography (Wiley)*, ideally suited for the microscope labs, is available for **free** on-line, courtesy of Mineralogical Society of America. Download it! The web link is:
http://www.minsocam.org/MSA/OpenAccess_publications.html?p=Craig_Vaughan This book also has reflected light mineral identification tables, although students seem to like the Spry & Gedlinske tables.

Lecture: Evans, A.M., 1993. Ore geology and industrial minerals - An introduction. 3rd edition. *Blackwell*: Oxford.
Roberts, R.G. & Sheahan, P.A., 1988. Ore deposit models. Vol I. *Geoscience Canada Reprint Series 3*.
Sheahan, P.A. & Cherry, M.E., 1993. Ore deposit models. Vol. II. *Geoscience Canada Reprint Series 6*.
Goodfellow, W.D. (ed.) 2007. Mineral deposits of Canada. *Geological Association of Canada Mineral Deposits Division Special Publication 5*, 1061 pp with DVDs.

The two 'Ore Deposit Models' softback books are excellent books that are good value. I refer to these two books, especially the first one, quite a bit throughout the course. Evans is a very good, clearly written introductory text that will be useful for this course and as a general reference beyond your BSc program. For the Canadian slant, Goodfellow '07 is a comprehensive review that is good value in addition to including a DVD of all diagrams, maps and papers.

Resource Materials: A list of books on reserve in the Gallagher Library is appended separately.

7. **Examination Policy:** Aids allowed: non-programmable calculator and, if needed, a ruler. Students should also read the Calendar, Section G, on Examinations.
8. **Approved Mandatory and Optional Course Supplemental Fees:** None
9. **Writing across the curriculum statement:** "In this course, the quality of the student's writing in laboratory reports will be a factor in the evaluation of those reports." See also Section E.2 of the University Calendar.
10. **Human studies statement:** N/A. See also Section E.5 of the University Calendar.

11. 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) **Academic Accommodation Policy:** Students with documentable disabilities are referred to the following links: Calendar entry on students with disabilities and Student Accessibility Services.
- (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: 220-3911 Email: suvpaca@ucalgary.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.

The following signature lines should be added to the course outline as appropriate

Original Signed