



# UNIVERSITY OF CALGARY

## DEPARTMENT OF GEOSCIENCE COURSE OUTLINE FALL 2016

**1. Course:** GLGY 623, Modern Diffraction and Scattering Techniques

Lecture Sections:

L01: We, 11:00 a.m.-1:45 p.m., ENA 235

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

[http://geoscience.ucalgary.ca/geoscience\\_info/courses/f16](http://geoscience.ucalgary.ca/geoscience_info/courses/f16)

Instructor: Dr. S. Antao, Office: ES 532, Ph. 403-220-3083, [antao@ucalgary.ca](mailto:antao@ucalgary.ca), Office Hours: M F 12:00-1:00 pm

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

**2. Prerequisites:** Geology 523 or equivalent. 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))

**Note:** Offered every alternate Fall Term

**3. Grading:** The University policy on grading and related matters is described in 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:

Assignment 1	10%
Assignment 2	20%
Assignment 3	20%
Seminar Participation	10%
Final Project (report-20%, seminar-20%)	40%

“Each piece of work (assignment, laboratory report, midterm test or final 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	Percent	Letter Grade	Percent
A+	95-100	C+	64-67
A	89-94	C	60-63
A-	84-88	C-	56-59
B+	78-83	D+	50-55
B	73-77	D	46-49
B-	68-72	F	0-49

**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:**

Zussman, J. (1977) Physical methods in determinative mineralogy. Academic Press, London ; New York.

Sivasankar, B. (2012) Instrumental Methods of Analysis. Oxford University Press, New Delhi.

Cullity, B.D. (1978) Elements of X-ray Diffraction. Addison-Wesley Publishing Company, Inc., USA.

Parise, J.B. (2006) Introduction to Neutron Properties and Applications. In Neutron Scattering in Earth Sciences (H-R Wenk, ed.). Reviews in Mineralogy and Geochemistry, 63, 1-25.

**6. Examination Policy:** All tests are closed book. No portable computing machines will be allowed. 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 in laboratory reports will be a factor in the evaluation of those reports. 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) **Academic Accommodation Policy:** Students with documentable disabilities are referred to the following links: Students with Disabilities: <http://www.ucalgary.ca/pubs/calendar/current/b-1.html> and Student Accessibility Services: <http://www.ucalgary.ca/access/>
- (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.

Department Approval: ORIGINAL SIGNED

Date: September 1, 2016

Associate Dean's Approval for

Alternate final examination arrangements: ORIGINAL SIGNED

Date: September 2, 2016