



# UNIVERSITY OF CALGARY

## DEPARTMENT OF GEOSCIENCE COURSE OUTLINE FALL 2017

1. **Course:** GLGY 639, Field Techniques in Hydrogeology

Lecture Sections: *none*

Lab Section B01: August 21-September 2, 2017 – based out of ES254

Tutorial: 9:00-12:00, Sept 5 – 8, 2017

Instructors:

Dr. Cathy Ryan, ES 268; 403-220-2793; [cryan@ucalgary.ca](mailto:cryan@ucalgary.ca) ; Office Hours: “open-door” or by email

Dr. Masaki Hayashi, ES 278, 403-220-2794, [hayashi@ucalgary.ca](mailto:hayashi@ucalgary.ca); Office Hours: “open-door” or by email

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2. **Prerequisites:** GLGY 401 or 601 and consent of the Department. 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 639 and 441 will not be allowed.

**Notes:** This course has limited enrolment. This course occurs in rugged field conditions and varying weather, for which participants must be prepared and equipped. Students will require consent of the department to drop this course.

Please Note: July 7, 2017 is the last day for registration and changes of registration in all summer GLGY field schools.

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:

Five group assignments (each worth 8%)	40%
Six reading assignments (each worth 0.8%)	5%
Seven individual assignments (each worth between 5 and 20%)	55%

Each piece of work (e.g. lecture and lab exams, lab assignments, project) 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. The conversion between course percentage and letter grade is given below.

Letter Grade	Percent	Letter Grade	Percent
A+	95-100	C+	65-69
A	90-94	C	60-64
A-	85-89	C-	56-59
B+	80-84	D+	53-55
B	75-79	D	50-52
B-	70-74	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. **Scheduled out-of-class activities:** A Safety Briefing will be held prior to departure in the morning of August 21<sup>st</sup> in room ES254. Field activities will be conducted over nine days (August 21<sup>st</sup> – Sept 2<sup>nd</sup>) normally beginning with a lecture at 8am in ES254.

**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 on reserve in the Gallagher include:  
Saunders, L., 1988. A manual of field hydrogeology; GB1002.3 .S26  
Weight, W. D., 2008. Hydrogeology field manual 2nd ed., GB1003.2 .W45 2008
7. **Examination Policy:** There will be no written Exams in this course; see point 3., above.
8. **Approved Mandatory and Optional Course Supplemental Fees:** A supplementary fee will be assessed to cover additional costs associated with this course.
9. **Writing across the curriculum statement:** The quality of the student's writing and data presentation will be a factor in the evaluation of student work. See also [Section E.2](#) of the University Calendar.

**10. 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: August 3, 2017

Associate Dean's Approval for

alternate final examination arrangements: ORIGINAL SIGNED

Date: August 14, 2017

**GLGY 639**

Day	Activity	Location
21-Aug	Vadose zone hydrology, slug tests, water level measurement and vertical hydraulic gradient estimation	Spyhill
22-Aug	Slug test analysis (AM), Water table mapping (PM)	Inglewood Bird Sanctuary
23-Aug	Surface water – groundwater interaction	Inglewood Bird Sanctuary
24-Aug	Tutorial (all day)	ES254
25-Aug	Groundwater and river sampling, measurement of field parameters, and in-field analysis of water samples	Inglewood Bird Sanctuary
26-Aug	Tutorial (all day)	ES254
27-Aug	Day off	
28-Aug	Pumping test	Irricana (tentative)
29-Aug	Drilling demo, lab tour	Multiple locations in Calgary
30-Aug	Tutorial	ES254 / Core log room
31-Aug	Report preparation	ES254
01-Sep	Report preparation (due on Sep. 5)	ES254
05-Sep	Tutorial for GLGY 639	ES254
11-Sep	Report due for GLGY 639	