

DEPARTMENT OF GEOSCIENCE COURSE OUTLINE FALL 2016

1. Course: GOPH 549, Petroleum Geology Field School

Lecture Sections: none

B01: August 22-August 27 Location: Castle Mountain and Environs B02: August 28-September 2 Location: Castle Mountain and Environs

T01: September 6-30 - Tuesdays, 17:00 - 19:50 SA 119

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2. **Prerequisites:** Geophysics 355, 453 and 457. 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)

Notes: This course occurs in rugged field conditions and varying weather, for which participants must be prepared and equipped. Students will be required to cover food and accommodation costs, and a supplemental fee will be assessed to cover the costs of equipment and other resources.

Owing to the resources and logistics involved in field school, withdrawal from the course without permission of the Department will only be allowed prior to the field portion. After attending the field portion, withdrawal from the course will be limited to extenuating circumstances. Relevant deadlines are listed below:

Last date to withdraw from GOPH 549 by section: Students will require consent of the Department to drop this course after the drop date-August 22nd for B01, August 28th for B02.

Last date to withdraw with penalty: B01 & T01 - September 4, 2016; B02 & T01 - September 11, 2016

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:

Field performance & participation 40% Field assignments 15%

Final report & oral exam 30% (During tutorial date TBA)

Tutorial attendance & participation 10% Team evaluations 5%

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.

The **field performance and participation** grade component will be assessed from field participation rubrics (to be posted on D2L) evaluated by TAs and/or instructors on each field day, as well as the quality of notes taken in field books. Field books will be evaluated based on quality and relevance of notes, as well as legibility. DO NOT remove pages from your field notes or re-write field notes after leaving the field. Only your original field notes will be evaluated.

The **field assignments** grade component will be based on a set of posters completed in teams after each day's field activities. The details of the assignments will be explained in the field, and they will have a rapid feedback cycle, with greater weight given to work completed toward the end of field school when more feedback has been provided.

After returning from the field, all students will be assigned a data set to analyse based on one of the methods encountered during field school. Students will analyse the data and write a report that presents a defensible model for interpreting the data, and discusses the key geophysical features of the data. Further details will be provided on D2L.

The **final report & oral exam** grade component will be based on the evaluation of this report, and performance in an oral exam involving questions about the report, and field school theory and practice in general.

The **tutorial attendance and participation** grade component will be assessed by the instructors based on a student's progress and engagement in tutorials and office hours when working on the report after field school. Instructors will be present at the tutorials to answer questions and provided feedback on report progress, but it is each student's responsibility to ensure that they demonstrate their engagement during the tutorials. One should not assume that simply attending the scheduled tutorials is sufficient to receive full participation marks.

The **team evaluations** grade component will be based on a combination of peer feedback forms filled out by teammates as well as instructors and TAs following field school. Remember that instructors and TAs are part of your team, and their opinion of your contribution to each day's activities carries equal weight to that of your peers.

The course involves use and manipulation of computer programs written in the programming language Matlab in the field and during the tutorials. Matlab codes and instructions for using the codes, in the form of preliminary exercises, are published on D2L roughly 1 month prior to the start of the field component. Students are expected to have worked through these exercises and to be familiar with the workings of the codes at the time their field course begins.

You must receive a passing grade in each of these components to pass the course. Assignment of letter grades:

| Grade % | Letter |
|---------|--------|
| 95-100 | A+ |
| 90-94 | Α |
| 85-89 | A- |
| 80-84 | B+ |
| 75-79 | В |
| 70-74 | B- |
| 65-69 | C+ |
| 60-64 | С |
| 58-59 | C- |
| | D+ |
| 50-59 | D |
| < 50 | F |

- **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 on August 22.

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:** "Applied Geophysics", 2nd Edition, by Telford, Geldart and Sheriff, Cambridge Lecture notes from GOPH 355 may be helpful.
- 7. Examination Policy: There will be no written Exams in this course; see point 3., above. Students should also read the Calendar, Section G, on Examinations.
- 8. Approved Mandatory and Optional Course Supplemental Fees: Transportation \$125; meals and accommodation involve a further fee TBA.
- 9. Writing across the curriculum statement: In this course, the quality and completeness of the student's writing in all field books and/or reports will be a factor in the evaluation of those reports. See also <u>Section E.2</u> 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
 SU Faculty Rep. Phone: 403 220-3913 Email: science2@su.ucalgary.ca
 and science2@su.ucalgary.ca
 and science2@su.ucalgary.ca
 and 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: August 12, 2016

Associate Dean's Approval for

alternate final examination arrangements: ORIGINAL SIGNED Date: August 16, 2016