

UNIVERSITY OF CALGARY
DEPARTMENT OF GEOSCIENCE
COURSE OUTLINE

1. Course: GOPH 517, Time series analysis and 1D seismic data processing

Lecture Sections:

L01: MoWeFr, 09:00-09:50, SB144 Instructor: G. F. Margrave, Office: ES218 Tel. No. 403-220-4606, margrave@ucalgary.ca, Office Hours: MoWeFr 13:00 – 14:00

Lab Sections:

Session	Time	Days	Location
B01	11:00 – 13:50	We	ES 924
B02	14:00 – 16:50	We	ES 924

Lab Instructor: Wenyong Pan, Office: ES218, Email: wpan@ucalgary.ca

Course Marker: Paul McGee, Office: ES218, Email: pmcgee@ucalgary.ca

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

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

2. Prerequisites: GOPH 355 and AMAT 415 (see <http://www.ucalgary.ca/pubs/calendar/current/geophysics.html#9558>)

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:

Grading Schedule	Percent
Lab Papers (2)	10%
Quizzes & LS Exams (best 8)	40%
Mid Term	20%
Final exam	30%
Total	100%

The beginning of each lab will be either a Quiz or a Lab Skills Exam. The quizzes will last 30 minutes while the Lab skills exams will last 1 hour and each count as two quizzes. The focus of each quiz will be anything covered in lecture since the previous quiz, but may include material from earlier lectures. Quizzes will begin promptly at the official lab start time and will continue for a precise time. Don't be late! Missed quizzes or Lab Skills Exams will count as a score of zero, there will be no opportunity for make-up. There are 8 possible quizzes plus each Lab Skills exam counts as two quizzes, for a total of 12 effective quizzes. Your eight (8) best quiz scores will be counted towards your course grade. You may consult your "course notes" or any of your previous quizzes during quizzes but you may not consult copies of quizzes from previous years. You will need a calculator and it is an advantage to learn to use MATLAB for this. The two lab skills exams are intended to motivate learning and assess you lab skills. Since the labs are mostly about using MATLAB for data analysis and processing, the Lab skills exams will require you to make calculations and plots similar to those already done in lab but without consultation with your friends.

A student's 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+	96-100	C+	60-64.9
A	90-95.9	C	50-59.9
A-	85-89.9	C-	45-49.9
B+	80-84.9	D	40-44.9
B	70-79.9	F	0-40
B-	65-69.9		

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:** Dates and times of approved class activities held outside of class hours.

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:** The course blackboard site contains all of the handouts for labs, as well as other resource material that you might find useful. You are also required to obtain the two texts (available in the University Bookstore):

Methods of Seismic Data Processing, by Gary F. Margrave

Getting Started with MATLAB, by Rudra Pratap

Reading the course blackboard page is not a substitute for attendance at lectures. The lectures provide an interactive environment that embellishes on, and provides a context for, the material in the textbook, whereas blackboard is a live site that allows for tailoring and updating of the course material during the term. Failure to attend the lectures will put you at a serious disadvantage.

7. **Examination Policy:** All exams and quizzes are "open book". During an exam or quiz, you may consult any course materials including notes and previous exams or quizzes *which you have made yourself*. You may not consult exams or quizzes from previous years. You may not access the internet or use email during an examination. The use of calculators or computers for computation is encouraged. Students should also read the Calendar, [Section G](#), on Examinations.

8. **Approved Mandatory and Optional Course Supplemental Fees:** N/A

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 (FOIP). 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