

School of Arts & Science SOCIAL SCIENCES DEPARTMENT GEOG 219

Field Surveying Winter 2016

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/geog.html

Ω Please note: the College electronically stores this outline for five (5) years only. It is strongly recommended you keep a copy of this outline with your academic records. You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Byron Smiley		
(b)	Office Hours:	Tuesday 3:30pm – 4:30pm		
(c)	Office Location:	Fisher Building 344D		
(d)	Phone:	250-370-3506	Alternative Phone:	
(e)	Email:	SmileyB@camosun.bc.ca		

2. Intended Learning Outcomes

Upon completion of this course the student will be able to:

- 1. Apply the core concepts of field surveying to enable accurate data collection.
- 2. Collect, correct and process field surveying data to ensure both accuracy and precision.
- 3. Use a variety of survey collection equipment with proficiency.

3. Required Materials

(a) Texts

There is no official textbook for this course as it is designed with a hands-on-learning curriculum. With that said, there are a number of electronic textbooks available on the web for you to consult and there are two textbooks on reserve in the library if you need further clarification.

I have also asked the Camosun Bookstore to bring in a limited number of copies of Surveying – 6th Edition by Jack McCormac, Wayne Sarasua and William Davis for those of you who would like to have a life-long resource for this material.

(b) Other (D2L)

There is also a course D2L site for electronic access to the lab exercises.

4. Course Content and Schedule

Lecture: Tuesday 1:30pm - 3:20pm Lab: Thursday 1:30pm - 4:20pm

(a) Course Description

This course introduces techniques and procedures of field surveying. Students will learn the principles of vertical and horizontal survey geometry, and perform field-based labs in small groups. They will become proficient with high-level equipment and the standards of field data recording. Students will generate accurate ground-survey maps.

(b) Preparedness

This course runs from January to April and has many lab activities out of doors. You are requested to dress for the weather: boots, warm jackets, rain coats, umbrellas...whatever will make your three hours outside more endurable, if not enjoyable. In the case of extreme weather, the labs may be cancelled or altered so please ensure you check the course D2L site for any updates.

A protractor, ruler, calculator and eraser are all necessary items during lab classes. The Geography Department is able to provide a limited number of these items but you would be wise to purchase your own, if possible.

(c) Learning Opportunities

Lectures: There will be six lecture topics this term and I will often spread the material over both class days. The blackboard will be heavily utilized and overheads and images will augment the traditional lecture style.

Labs: There are fifteen labs in the course. Each lab contains exercises to familiarize students with the tools and techniques of field surveying. A variety of different measurement techniques and surveying protocols will be practiced during the lab period. Attendance is mandatory. In the case of illness, the instructor must be contacted prior to the class time and an alternate arrangement must be made; otherwise, a mark of zero will be assigned. Assignment due dates will be determined in class and lab submissions will not be accepted after marked assignments have been returned.

Exams: There are three Unit Tests in the course: Thursday, February 4th, Thursday, March 10th, and Thursday, April 14th.

Course Schedule - Winter 2016

schedule is subject to change

<u>Wk #</u>	Week of:	<u>Tuesday</u>	<u>Thursday</u>
1	Jan 11	Course Introduction	Lab 1 – Measurement
2	Jan 18	Coordinate Systems Lab 2 – UTM	Coordinate Systems Lab 3 – Latitude & Longitude
3	Jan 25	Map Features Lab 4 – Directional Conversion	Map Features Lab 5 – Angles
4	Feb 01	Field Notes & Quiz Preparation	Unit Test #1
5	Feb 08	Measurement Correction Lab 6 – Proportion-to-Station	Lab 7 – Compass and Pace
6	Feb 15	Reading Break	Reading Break
7	Feb 22	Measurement Correction Lab 8 – Latitude & Departures	Lab 8 – Latitude & Departures
8	Feb 29	Global Positioning Systems Lab 9 – GPS – Plotting	Lab 10 – GPS – Data Logging
9	Mar 07	Quiz Preparation	Unit Test #2
10	Mar 14	Differential Leveling	Lab 11 – Differential Leveling
11	Mar 21	Total Stations	Lab 12 – Total Stations – HA
12	Mar 28	Easter Monday	Lab 13 – Total Stations – SD
13	Apr 04	Lab 14 – Total Station – Checkerboard	Lab 15 – Total Stations – Spot Height
14	Apr 11	Quiz Preparation	Unit Test #3

4. Basis of Student Assessment (Weighting)

Lab Breakdown			
Labs	% of Course Total	Labs	% of Course Total
Lab #1	1.5	Lab #9	3.0
Lab #2	1.5	Lab #10	3.0
Lab #3	2.5	Lab #11	3.0
Lab #4	1.5	Lab #12	4.0
Lab #5	2.0	Lab #13	4.0
Lab #6	3.0	Lab #14	3.0
Lab #7	4.0	Lab #15	4.0
Lab #8	4.0		
Lab Total		44.0	

Exam Breakdown	
Exams	% of Course Total
Unit Test #1	15.0
Unit Test #2	25.0
Unit Test #3	16.0
Exam Total	56.0

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at **camosun.ca** for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
1	<i>Incomplete</i> : A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	In progress: A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
cw	Compulsory Withdrawal: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.