DEPARTMENT OF GEOGRAPHY - UNIVERSITY OF VICTORIA
COURSE OUTLINE - GEOGRAPHY 325
FIELD SURVEYING
Summer 2016

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.

Instructor
Dr. Ian J. O'Connell (ianoc@uvic.ca, DTB B322, Local 7338)

Class time
Monday 9.00 - 10:50 DTB B311
Tuesday 9.00 - 10:50 DTB B311

Office Hours
See CourseSpaces or by appointment

Course Objectives
introduce the techniques and procedures of field surveying;
consolidate understanding of fundamentals of geographic information;
introduce leveling, stadia and precision traversing;
complete individual and group field surveying exercises

Learning Outcomes
ability to apply core concepts in field surveying;
proficiency in the ability to correctly record and calculate field surveying measurements;
familiarity with surveying equipment;
appreciation of error and error method corrections.

Class Meetings
Class will meet on a regular basis twice a week. Attendance in class is mandatory and expected in order for you to understand and complete lab assignments, and to pass examinations. Note: Not all material may be posted on CourseSpaces. Attendance will be taken.

NOTE: No Audio or Video recordings of Lectures or Labs permitted

Field Projects
This course includes 3 graded field projects

Examinations
There will be one mid-term and a final examination.

Course Topics include:
Declination
Azimuths
Horizontal and Vertical Control systems
Field Traversing
Stadia
Departures and Latitudes
Precision Traversing
Differential Leveling
Precision Contouring
Differential GPS
Course Evaluations and Deadline Dates

<table>
<thead>
<tr>
<th>Component</th>
<th>Value (%)</th>
<th>Dates</th>
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<tbody>
<tr>
<td>A</td>
<td>40</td>
<td>See Below</td>
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<tr>
<td>B</td>
<td>15</td>
<td>Monday 30th May 9.00am – 10am.</td>
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<tr>
<td>Final</td>
<td>45</td>
<td>Tuesday 21st June 8.30am - 1050am</td>
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LAB TIMETABLE K2016 (Grades and submission requirements)

May 11/12: Field Orientation & Leveling
May 18/19: Leveling continued *60 marks/7.5% Due: Assignment #2
May 25/26: Stadia (TN) *100 marks/15.0% Due: Leveling Reports
May 31* Assignment #9 – completed in Tuesday class (DTB B311)
Jun 1/2: Stadia continued
Jun 8/9: Traversing (UTM) & NEZ Data Collection *70 marks/12.5% Due: Assignment #10 and Stadia Reports
Jun 15/16: GPS Data Collection, Traversing cont. Due: Assignment #11
Jun 22/23 GPS & XYZ DTM’s (meet in A249) **20 marks/5% Due: ***Traversing Reports & DTM’s

* Report marks include mandatory assignment marks.
** DTM’s
*** Reports due at the beginning of the lab.
TN – connecting
UTM – closed loop w/ DMD

Readings and Course Help

This course has no required text; however, a number practice assignments (un-graded) will be posted in order for you to implement theory learnt both in the field and in class. It is highly recommended that you attempt these as they will provide significant practice for both the midterm and final. These assignments will constitute material that is examinable.

I will try to make copies available of the slides etc. before the beginning of class. These copies will be placed online on CourseSpaces (Make sure that you have a UVic NETLINK ID to access these and the lab assignments). Note that these do not replace the in-class materials or materials.

Electronic devices for use during exams are limited to non-graphing scientific calculators unless otherwise expressly permitted by the course instructor.

Lab assignments are due at beginning of your scheduled lab time. Students submitting labs late will be penalized. The initial late penalty is 25%. For every day after that, you will lose 25% per day. An ‘N’ grade is given when a student has missed one or more components of a course and does not reach a passing grade. Failure to complete an assignment (Labs) or exam (midterm, or final), without permission from the instructor, will result in an ‘N’ grade, which equals a Grade Point Value of 0). Exceptions will only be granted for medical reasons (requiring a written report from a medical practitioner as soon as possible stating your inability to attend class). The written report must be submitted as soon as possible. The course instructor can only grant exceptions.

University Grading Scale

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>90%</td>
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<tr>
<td>A</td>
<td>85%</td>
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<tr>
<td>A-</td>
<td>80-84%</td>
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<tr>
<td>B+</td>
<td>77%</td>
</tr>
<tr>
<td>B</td>
<td>73%</td>
</tr>
<tr>
<td>B-</td>
<td>70%</td>
</tr>
<tr>
<td>C+</td>
<td>65%</td>
</tr>
<tr>
<td>C</td>
<td>60%</td>
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<tr>
<td>D</td>
<td>50%</td>
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<tr>
<td>F</td>
<td>0-49%</td>
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Equipment Policy

1. Survey instruments and equipment have been purchased specifically for the instruction of this course. Due to the delicate nature of the equipment and the minimal number of instruments for this purpose, the instruments will not be available for use in other Geography courses.

2. Survey instruments and other scientific equipment used in this course must not be used in or near salt water including beach areas below the high water mark.

3. Students are specifically requested NOT to repair, alter or adjust any equipment unless requested to do so by their instructor. Repairs and adjustments of equipment are handled through the course instructor.

4. All equipment required for projects must be used during regularly scheduled lab sections. Students are responsible for the care and security of all equipment while in their possession. Please report any damage or malfunctions promptly to your lab instructor.

5. When setting up instruments please ensure that they are not in vehicle or pedestrian traffic areas. You are responsible for any damage that occurs to the instruments if an accident should occur under these conditions.

6. Students are solely responsible for cleaning all tripods, rods and tapes BEFORE returning them to the trolley. Damp levels, transits and theodolites should be patted dry and then set in their respective cases with the lids open in order to air dry. Treat all instruments and equipment as though you were going to be the next person to use them.

7. Whilst outside you are required to wear the high visibility vests (supplied).

Campus Regulations

Unless otherwise directed by your lab instructor, no permanent markings can be left on any survey site on campus including pins, hubs, tapes, flags and the painting of objects. Cutting of trees, branches and permanent flagging of vegetation is specifically prohibited on campus. Students receiving complaints from any campus officials while doing their field work should report such matters to the course instructor (local 7338) as soon as possible.

Note: Students will be expected to use basic trigonometry when working with their survey data. You will need a calculator with trigonometric and decimal degree functions for most of that work. Suitable clothes for field work on muddy or wet areas should be worn for most laboratory exercises.

Warning: Academic integrity requires commitment to the values of honesty, trust, fairness, respect and responsibility. It is expected that students, faculty members and staff at the University of Victoria, as members of an intellectual community, will adhere to these ethical values in all activities related to learning, teaching, research and service. Any action that contravenes this standard, including misrepresentation, falsification or deception, undermines the intention and worth of scholarly work and violates the fundamental academic rights of members of our community. Students are advised to consult the university's Policy on Academic Integrity in the University Calendar. The instructor reserves the right to use plagiarism detection software programs to detect plagiarism in term papers.

Course Experience Survey (CES)

I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Resource Centre for Students with a Disability (RCSD) as soon as possible. The RCSD staffs are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations http://rcsd.uvic.ca/. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.