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

**Course Instructor**  
Dr. Ian J. O’Connell (ianoc@uvic.ca, DTB B322, 250-721-7338)

**Lab Instructor**  
Dr. Philip (Phil) Wakefield (pmw@uvic.ca, DTB B302, 250-472-4269)

**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

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

**Field Projects**  
This course includes 5 graded projects and 15 assignments (4 mandatory)

**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
Course Evaluation [Students must pass both components in order to receive a passing grade.]

<table>
<thead>
<tr>
<th>Component</th>
<th>Value (%)</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Field Projects</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Midterm</td>
<td>20</td>
</tr>
<tr>
<td>B</td>
<td>10 Quizzes</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Final</td>
<td>44</td>
</tr>
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</table>

**Lab Grades**

<table>
<thead>
<tr>
<th>Instrument and Field Orientation</th>
<th>Individual (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leveling</td>
<td>5.0</td>
</tr>
<tr>
<td>Heights of Objects</td>
<td>3.0</td>
</tr>
<tr>
<td>Precision Traversing 1</td>
<td>11.0</td>
</tr>
<tr>
<td>Precision Traversing 2</td>
<td>12.0</td>
</tr>
<tr>
<td>Digital Terrain Models</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Individual (%)**

- Instrument and Field Orientation: not for marks - compulsory

**Lab Timetable K2018**

**Week of:**

- **May 14:** Field Orientation & Leveling *55 marks/5.0%
- **May 21:** Heights of Objects; Leveling continued 25 marks/3.0% Due: Man. Leveling Assignment
- **May 28:** Traverse 1 (TN-Closed Loop) *75 marks/11.0% Due: Heights of Objects; Leveling Reports
- **Jun 4:** Traverse 1 continued Due: Man. Assignments (Traverse 1 & DMD)
- **Jun 11:** Traverse 2 (UTM-Connecting) *79 marks/12.0% Due: Traverse 1 Reports
- **Jun 18:** ENZ Data Collection; Traverse 2 cont. Due: Man. Traverse 2 Assignment
- **Jun 25:** ENZ DTM’s (meet in A249) **20 marks/4.0% Due: Traverse 2 Reports & DTM’s

* Report marks include mandatory assignment marks.
** DTM’s

35% overall
Mandatory Assignment Marks

10  Completed perfectly including all checks and balances
5  Completed entirely but with missing errors or missing checks balances – No Redoes
5  Redo of an assignment originally given a 0, 48 hour time-limit for resubmission
0  Late or did not hand in

SUBMISSIONS AND EXAMS

All lab projects and mandatory assignments must be submitted at the beginning of the Lab Session as shown above, or into the 325 Lab Drop Box (outside DTB B203) before the start of lab. **Late lab projects are subject to a penalty of 25% of the value of the project per day.** For example: Lab start time is Wednesday at 9:00. It is late at 9:01 - minus 25%. After 9:00 on the following Thursday - minus 50%. And, so on. Weekends count as minus 25%. **Late assignments will not be considered for marks.**

Failure to complete a lab project 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.

Readings and Course Help
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.

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

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 theodolites and total stations 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 a high visibility vest (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.

University Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>90-100%</td>
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<tr>
<td>A</td>
<td>85-89%</td>
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<tr>
<td>A-</td>
<td>80-84%</td>
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<tr>
<td>B+</td>
<td>77-79%</td>
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<tr>
<td>B</td>
<td>73-76%</td>
</tr>
<tr>
<td>B-</td>
<td>70-72%</td>
</tr>
<tr>
<td>C+</td>
<td>65-69%</td>
</tr>
<tr>
<td>C</td>
<td>60-64%</td>
</tr>
<tr>
<td>C</td>
<td>50-59%</td>
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<tr>
<td>F</td>
<td>0-49%</td>
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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 Centre for Accessible Learning (CAL) as soon as possible. The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations https://www.uvic.ca/services/cal/ The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course. Please note: You are under no obligation to disclose.