

DEPARTMENT OF GEOGRAPHY - UNIVERSITY OF VICTORIA
COURSE OUTLINE - GEOGRAPHY 325 A01
FIELD SURVEYING
Summer 2017

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

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| Instructor | Dr. Ian J O'Connell (ianoc@uvic.ca, DTB B322, 250-721-7338) |
| Class time | Monday 9.00 - 10:50 DTB B311 Tuesday 9.00 - 10:50 DTB B311 |
| Office Hours | See CourseSpaces or <i>by appointment</i> |
| Course Objectives | <ul style="list-style-type: none">- 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 | <ul style="list-style-type: none">- 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 <i>NOTE: No Audio or Video recordings of Lectures or Labs permitted</i> |
| 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 Differential GPS |

COURSE EVALUATION | **Students must pass both components in order to receive a passing grade.**

| Component | | Value (%) | Dates |
|-----------|----------------|-----------|--|
| A | Field Projects | 40 | See Below |
| B | Midterm | 20 | Monday May 29th |
| | 10 Quizzes | 1 | Tuesday or Wednesday from 9.00 to 9:05 |
| | Final | 39 | Tuesday June 27th |

LAB GRADES

Individual (%)

| | |
|----------------------------------|---------------|
| Instrument and Field Orientation | not for marks |
| Leveling | 7.0 |
| Heights of Objects | 5.0 |
| Precision Traversing 1 | 14.0 |
| Precision Traversing 2 | 9.0 |
| Digital Terrain Models | 5.0 |

LAB TIMETABLE

| Week of: | Lab description | Due dates for lab projects and Mandatory Exercises Due |
|----------|---------------------------------------|--|
| May 8: | Field Orientation & Leveling | |
| May 15: | Heights of Objects; Leveling continue | Due: Man. Leveling Assignment |
| May 22: | Traverse 1 (Closed Loop) | Due: Heights of Objects; *Leveling Reports |
| May 29: | Traverse 1 continued | Due: Man. Assignments (Traverse 1 & DMD) |
| Jun 5: | Traverse 2 (Connecting) | Due: *Traverse 1 Reports |
| Jun 12: | ENZ Data Collection; Traverse 2 cont. | Due: Man. Traverse 2 Assignment |
| Jun 19: | ENZ DTM's (meet in A249) | Due: *Traverse 2 Reports & DTM's |
| Jun 26: | No Labs | |

* Report marks include mandatory assignment marks.

MANDATORY ASSIGNMENT MARKS

| | |
|----|---|
| 10 | Completed perfectly including all checks and balances |
| 5 | Completed entirely but with 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 Thursday at 9:00. It is late at 9:31 - minus 25%. After 9:00 on the following Friday - 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

| A+ | A | A- | B+ | B | B- | C+ | C | D | F |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 90-100% | 85-89% | 80-84% | 77-79% | 73-76% | 70-72% | 65-69% | 60-64% | 50-59% | 0-49% |

- A+ to A-: Work which is technically superior and shows mastery of the subject matter. Normally achieved by a minority of students.
- B+ to B-: Work that indicates a good comprehension of the course material, a good command of the skills needed to work with the course material, and the student's full engagement with the course requirements and activities.
- C+, C: Work that indicates an adequate comprehension of the course material and the skills needed to work with the course material, and that indicates the student has met the basic requirements for completing assigned work.
- D: Work that indicates minimal command of the course materials.

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 quality of programs 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 staff 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, then the quicker we can assist you in achieving your learning goals in this course. **Please note:** You are under no obligation to disclose your disability*