

**Grande Prairie Regional College
Department of Science**

Course Outline (Fall 2007)

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|-------------------------|---|-------------------------|--|
| Course: | Introduction to Field Skills (FO1020) 2(1-0-3) | | |
| Instructors | Office | Phone | E-mail |
| Weixing Tan, PhD, RPF | C213 | 539-2793 | wtan@gprc.ab.ca |
| Classroom | Lab | Time of Lectures | Time of Labs |
| C316 | B302 & field | 8:30-9:20 Thursday | 14:30-17:20 Monday |
| Prerequisites: | None | | |
| Transfer Status: | University of Northern British Columbia NREM100 | | |

Calendar Description

Introduction to basic field skills in the natural resources, including orienteering, surveying, first aid, outdoor survival, and search and rescue. Extensive field work required.

Course Objectives

- To prepare students for courses and careers in natural resource management by providing them with a set of basic field skills and techniques.
- To enable students to feel comfortable and confident while working in the field.

Required Text Book

Materials will be distributed.

Reference books

- Johnson, Kershaw, MacKinnon & Pojar. 1995. *Plants of the Western Boreal Forest & Aspen Parkland*. Lone Pine Publishing. 392 p. (Strongly recommended).
- MacKinnon, Pojar & Coupe. 1992. *Plants of Northern British Columbia*. B.C. Ministry of Forests & Lone Pine Publishing. - Recommended.
- Munn J. 2000. *Outdoor Navigation with Map and Compass*. WSU Extension Bulletins Press. (free download at <http://cru84.cahe.wsu.edu/cgi-bin/pubs/EM2474.html>).

Useful Web Sites

- <http://www.consciouschoice.com/2002/cc1501/wintersurvival1501.html>
- <http://www.captaindaves.com/guide/>
- <http://survivalx.com/wilderness-survival/>
- <http://www.hikercentral.com/survival/>
- <http://www.abc-of-hiking.com/navigation-skills/>
- <http://www.thecompassstore.com/compassfaqs.html>
- <http://cru84.cahe.wsu.edu/cgi-bin/pubs/EM2474.html> (free download)

Lab Gear and Equipment

Most lab sessions will be held outdoors. Students should come prepared for the weather. **Rain gear** and **waterproof boots** are absolutely necessary. Once the weather turns cold, warm clothes, gloves and hat are essential. In addition, the following equipment is required or recommended:

Required

- One 6" (15 cm) plastic ruler, pencils
- Notebook

Recommended

- One Nexus or other compass with declination adjustment
- Waterproof paper (the kind with 6 columns both sides)
- Cruise vest

Source for Equipment in Grande Prairie

- Commercial Solutions Inc., 9621 – 115 St, Grande Prairie, Phone 814-5933.

Course and Lab Content

(The sequence of the lectures and labs may be changed depending on weather conditions.)

| Week | Lecture (1 hour/week) | Lab (one 3 hour lab/week) |
|------|--|--|
| 1 | 1) Course introduction 2) Bush safety - Things that bite, sting and poison such as bears, moose, hanta virus, ticks, poison ivy, baneberry. | Map and compass skills, lines, setting and taking bearings, topographic maps., contour intervals |
| 2 | Map features and forest cover maps | Orienteering, map reading, route finding (off campus) |
| 3 | Plant keys, ecosystems, plant Identification, indicator plants | Tree and plant identification and indicator plants (off campus) |
| 4 | Plant keys, ecosystems, plant Identification, indicator plants (continued) | Tree and plant identification and indicator plants (continued) |
| 5 | Distance measurement techniques, traversing | Traverse I - Distance measurement, traversing (off campus) |
| 6 | Map features, triangulation, altimeter, barometer | Traverse II - Mapping of a retention patch in GPRC Training Forest |
| 7 | Bush safety - general, staying found and not getting lost | Survival skills - signals, knots, map and altimeter use, triangulation |
| 8 | Fisheries - sampling techniques and equipment, effects on fish | Midterm - orienteering and plant ID |
| 9 | Tree measurements-tree height calculation | Tree Measurements - dbh, height, age, prism sampling |
| 10 | Remote sensing and use of GPS - air photos, satellites, introduction to GPS | Air Photo Interpretation and GPS |
| 11 | Remote sensing and use of GPS (continued) - air photos, satellites, infra-red, introduction to GPS | Air Photo Interpretation and GPS – take home assignment (continued) |
| 12 | Bush safety - Winter survival, hypothermia, frostbite, clothing, avalanches, snowshelters | Winter Survival – snowshoes, shelters, fires, avalanche transceivers, |
| 13 | Bush safety - Winter survival, hypothermia, frostbite, clothing, avalanches, snowshelters (continued) | Winter Survival – snowshoes, shelters, fires, avalanche transceivers (continued) |
| 14 | Course review | Lab review |
| 15 | Final exam | |

Requirements

Regular attendance to the lectures and participation in classroom discussion are required. Presence at each laboratory for this course is compulsory. A passing grade in the lab is required to pass the course. A medical note from your Doctor(s) is required for all excused absences. Mark will be deducted on the overdue assignment(s) and lab report(s) at a rate of 20% per day. Plagiarism is a serious academic offence and will be dealt with according to the relevant College policies/regulations. The instructor reserves the right to use electronic plagiarism detection services.

Evaluation (relative percentage):

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|------------------------------------|------|
| Class & lab assignments/quizzes | 30% |
| Midterm (written and practical) | 30% |
| Final Exam (written and practical) | 40% |
| | 100% |

| <i>Alpha Grade</i> | <i>4-Point Equivalent</i> | <i>Designation</i> |
|--------------------|---------------------------|-----------------------------|
| A+ | 4.0 | <i>Excellent</i> |
| A | 4.0 | |
| A- | 3.7 | <i>First Class Standing</i> |
| B+ | 3.3 | |
| B | 3.0 | <i>Good</i> |
| B- | 2.7 | |
| C+ | 2.3 | <i>Satisfactory</i> |
| C | 2.0 | |
| C- | 1.7 | |
| D+ | 1.3 | <i>Minimal Pass</i> |
| D | 1.0 | |
| F | 0.0 | <i>Fail</i> |