

GEOGRAPHY 210 MAP AND AIR PHOTO INTERPRETATION

Course Outline, Winter 2010

Instructor: Thiago Silva Office: Paul 233 Phone: 370-3370 Email: silvat@camosun.bc.ca

Office hours: Tuesdays 1:00pm – 2:20pm, or by appointment.

COURSE DESCRIPTION:

This course is designed to introduce students to the practical skills of map use and aerial photography interpretation, and as an introduction to field surveying techniques. Cartographical theory and the conventions of map design will be discussed in class; the principles of map symbol interpretation will be introduced and practiced in a laboratory setting. Vertical and oblique aerial photographs will be viewed, stereoscopically where appropriate, and students will learn basic feature identification using these visual images. The mechanics and constraints of this data collection technique will be briefly explored and the conventions of presentation will also be discussed.

LECTURES AND LABS:

Location:	Fisher 338	
Time:	Tuesdays	2:30 – 4:50pm,
	Thursdays	1:30 – 3:50pm

Due to the technical nature of the course, lectures and labs will be interspersed according to a logical progression, which might differ from the "1 lecture, 1 lab" weekly schedule. This will ensure proper continuity between lecture material and lab activities.

Online Platform: Camosun Online (Desire2Learn): http://online.camosun.ca/

Labs: There are thirteen labs in the course. Each lab contains exercises to familiarize students with the tools and techniques of map and air photo interpretation. A variety of different map types will be used and a full range of natural and social features will be profiled in the laboratory assignments. Attendance during lab periods is <u>mandatory</u>. In the case of illness, the instructor must be contacted <u>prior</u> to the class time and an alternate arrangement must be made; otherwise, a mark of **zero** will be assigned.

Late Assignment Policy: Class assignments are due one week after, at the beginning of class. 25% will be deducted from the lab assignments, for every business day late. Exceptions will only be granted for medical reasons (requiring a written note from a medical practitioner stating your inability to attend class) or other extreme personal crisis.

<u>Midterm Exam</u>: One midterm exam will be given during the term. It will be held on **Tuesday**, **February 23rd** and will be a selection of short-answer, multiple-choice, and skill-based questions.

Final Exam: There will be a three-hour final exam during Exam Week. This exam will be **comprehensive**, requiring students to demonstrate knowledge of the important concepts and essential skills presented and acquired during the entire semester.

EVALUATION:		
Midterm Exam	20%	
Lab Exercises	50%	
Final Exam	<u>30%</u>	
	100%	

TEXTBOOK:

Map Use and Analysis by John Campbell, McGraw Hill Publishing - 4th Edition, 2001.

*The purchase of this textbook is **<u>OPTIONAL</u>** for this course.*

GRADING:

The standard grading scale of the Division of Arts and Science will be used for this course.

A+	>90%	В-	70-72%
А	85-89%	C+	65-69%
A-	80-84%	С	60-64%
B+	77-79%	D	50-59%
В	73-76%	F	<50%

COURSE SCHEDULE

Schedule is subject to change at any time during the course

Date	Tentative Schedule
07-Jan	Lecture 1 - Course Introduction
12-Jan	Lecture 2 - Coordinate Systems/Datums
14-Jan	Lecture 3 - Map Projections
19-Jan	Lab 1 - Map Types
21-Jan	Lab 2 - UTM
26-Jan	Lab 3 - Topographic Maps
28-Jan	Lecture 4 - Scale, Azimuth, Bearings
02-Feb	Lab 4 - Compass/Pace
04-Feb	Lecture 5 - GPS
09-Feb	Lab 5 - GPS
11-Feb	Lab 6 - Geocaching
16-Feb	Lecture 6 - Vertical Surveying
18-Feb	READING BREAK
23-Feb	MIDTERM
25-Feb	Lab 7 - Vertical Surveying
02-Mar	Lab 8 - Traverse Horizontal
04-Mar	Lab 9 - Traverse Mapping
09-Mar	Lecture 7 - Electromagnetic Spectrum / Intro Airphotos
11-Mar	Lecture 8 - Films, Exposure, Geometry
16-Mar	Lab 10 - Airphoto I
18-Mar	Lecture 9 - Airphoto Interpretation
23-Mar	Lab 11 - Airphoto II
25-Mar	Lecture 10 – Stereo-photography / Ortho-photography
30-Mar	Lecture 11 - Airphoto Mission Planning
01-Apr	Lab 12 - Airphoto III
06-Apr	Lecture 12 - Introduction Digital RS / GIS
08-Apr	Review
Exam Week	FINAL EXAM