

ES3323A

Introduction to Geodesy and Remote Sensing

Professor:

Dr. Kristy Tiampo

Office: BG 0168

Phone: x83188

E-mail: ktiampo@uwo.ca

Office hours: TBA

Lectures: Two sessions, one hour each.

Laboratory: One lab, three hours.

Course Description: An introduction to the basic concepts of geodesy and geodetic surveying, to include geometrical and physical geodesy. Material covered will include datums and coordinate systems, space and surface geodetic techniques, gravity and precise leveling, uncertainty estimation, and error propagation. Specific applications will include GPS data collection and analysis.

Required Text: “Geodesy”, John Wahr (pdf, available from <http://landau.mines.edu/~samizdat>), or alternate; and “GNSS – Global Navigation Satellite Systems”, Hoffman-Wellenhof, et al.

Prerequisites: [Calculus 2303A/B](#) or [2503A/B](#)..

Grading, ES3323:

Homework assignments – 15%.

Labs – 25%.

Two Midterm Exams – 30%.

Final Paper – Due on last day of class, 20%.

Oral Presentations on paper - 10%.

Laboratories: Labs will cover specific geodetic analysis and remote sensing techniques. Lab assignments will present processing results, and number four to six, depending on total progress.

Late Policy: Homework assignments and laboratories are due on the date specified on the assignment. 10% will be deducted for every day late. If you have exceptional circumstances, please contact Dr. Tiampo prior to the due date.

Electronic Devices: Computers, cell phones, music players and cameras will not be used during class time or examinations. Calculators will be required.

Academic Honesty Statements:

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Medical Issues:

For UWO Policy on Accommodation for Medical Illness and a downloadable SMC see:

http://www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department.

For components or assignments worth less than 10%, individual arrangement will be made between the student and instructor.