

# Advanced GIS & Spatial Analysis

## Geography 4211 – Winter 2015

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### Course Description:

This is an advanced course in the applications of geographic information systems and spatial analysis. The course will be delivered through a combination of lectures, seminar discussions, student presentations and laboratory work (see Schedule). Students will continue to develop their working expertise of ArcGIS along with other software packages.

### Instructors:

The course in Winter 2016 will be jointly delivered by a team of instructors. The specific content and sequencing of the sessions has been developed to take advantage of the varied expertise amongst the instructional team. For consultation outside of designated class times, students should approach the respective instructor to which the specific coursework pertains; otherwise inquiries of a general or logistical nature, should be directed to the Chair of Geography who will also be the lead coordinator.

### Chair and Lead Coordinator:

Dr. Rob Stewart  
Office: RC-2006E  
rob.stewart@lakeheadu.ca

*Office Hours: as posted on the door  
of each instructor.*

### Other Instructors:

Mr. Jason Freeburn (RC-2004)  
jason.freeburn@lakeheadu.ca

Dr. Kamil Zaniewski (RC-2006F)  
kamil.zaniewski@lakeheadu.ca

Dr. Brad Wilson (RC-2006A)  
brad.wilson@lakeheadu.ca

### Grading:

Laboratory Assignments:		35%
ArcGIS Modules:		10%
Group Project:		30%
Initial planning report	10%	
Proposal Presentation	05%	
Database/map deliverables	10%	
Final presentation	5%	
Final Exam:		<u>25%</u>

**TOTAL: 100%**

**Meeting Times:**

Lectures: Monday and Wednesday  
1:30 – 2:30p.m.  
RC-2003

Laboratory: Tuesdays  
2:30 – 4:30p.m.  
ATAC-3009

**Required Materials:**

**Text:** Chang, K., 2014. *Introduction to Geographic Information Systems*, 7<sup>th</sup> Edition (New York, NY: McGraw-Hill), 425 pages with companion CD [ISBN 978-0-07-352290-6] (***You will need to bring the textbook and its companion CD to each lab period***)

**Storage Device/Drive:** Each student will be required to have a secure method for long-term storage of spatial (and other) files. The laboratory computers in ATAC-3009 (as with all university laboratory hardware), do not allow for storage on the hard drive. It is therefore recommended that you use a drive share (for example, Google Drive can be accessed through your Lakehead Gmail account), and/or portable USB memory device for digital storage.