

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

APPL 5110: Planning Applications in GIS

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 2 h + Seminar 0 h + Lab 2 h

Credits: 3

Transfer credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

This is an introductory course in Geographic Information Systems (GIS) intended to allow students to become familiar with the common and appropriate software, for example GIS & ArcView.

Registration in this course is restricted to students admitted to the Applied Planning program.

Prerequisites: None

Corequisites: APPL 4110

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Identify GIS definitions and applications along with the major components of GIS. Within this framework, be familiar with spatial analysis concepts that include spatial awareness, spatial features, and spatial patterns. Students will understand how spatial data interacts with attribute information which brings about an understanding of spatial relationships that include proximity analysis, trends and relational databases.
- Apply technical skills, including visual overlays, data merging, intersect and union, clip options, mask and replace, weights, buffers, and reporting and graphic functionality. Familiarity with GIS functionality, including density and proximity analysis, connection analysis, aggregation, centroids, proximal polygons, terrain analysis and modelling, slope and aspect, and 3D analysis
- Apply projections and scale and understand the concept of topology what this means to spatial analysis, including raster and vector datasets and what they mean in the world of GIS.
- Prepare thematic and classification maps as well as dealing with different cartographic issues in map making that include text and labels, titles, scale, layout, colour and other cartographic features.
- Analyse and manage data including quality control, with an understanding of data error, accuracy and precision. Within this framework, appreciate data costs, standards that include metadata, accessibility and data sharing and data interpretation

snəwəyət̚ leləm̚ Langara College acknowledges that we are located on the unceded territory of the Musqueam people.

Instructor(s): TBA

Office: TBA **Phone:** 604 323 XXXX **Email:** TBA

Office Hours: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

ESRI. "Getting to know ArcGIS for Desktop". USA. 2010.

Change, Kang-tsung. "Introduction to GIS". USA. 2013.

Note: This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.

Assessments and Weighting:

Final Exam %

Other Assessments %

(An example of other assessments might be:) %

Assignments: 50%

Quizzes/Tests: 20%

Proportion of individual and group work:

Individual: 100%

Grading System: Percentage

Specific grading schemes will be detailed in each course section outline.

Passing grade: C

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

The course is composed of five parts which will run concurrently through the term. The main topics covered in the course include:

- Getting started with maps and data
 - Interacting with Maps and Data

This generic outline is for planning purposes only.

- Online Resources
- Displaying and presenting data
 - Working with Coordinate Systems and Projections
 - Symbolizing, Classifying and Labeling Features and Making Maps for Presentation
- Creating and editing data
 - Building Geodatabases
 - Creating and Editing Features and Attributes
 - Geocoding Address
- Getting Information about features
 - Querying, Joining and Relating Data
 - Select Features by Location
- Analyzing feature relationships
 - Preparing and Analyzing Data
 - Analyzing Raster Data

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

[E1003 - Student Code of Conduct](#)

[F1004 - Code of Academic Conduct](#)

[E2008 - Academic Standing - Academic Probation and Academic Suspension](#)

[E2006 - Appeal of Final Grade](#)

[F1002 - Concerns about Instruction](#)

[E2011 - Withdrawal from Courses](#)

Departmental/Course Policies:

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