**GGR499H1: Statistical Testing and Analysis – Wed 11-2pm, Fall 2024**

This course is offered jointly with the Graduate Planning course JPG1170H.

This course advances important quantitative methods and techniques used in the analysis of empirical data in Geography, Planning and other Social Sciences. It aims to provide a comprehensive understanding of statistical methods for graduate and advanced undergraduate students required to

1. quantify relations and dependencies between variables and
2. conduct statistical tests in a variety of applications related to the Canadian urban system.

The topics of the course include probability distributions, statistical testing and inference, as well as linear and non-linear, simple and multiple regression and correlation techniques. The application of these methods through the use of statistical software (primarily SPSS) – both menu- and code-based – will also be part of the course. Canadian Census data comprising a large set of socio-economic variables for metropolitan/urban areas for the years 2011, 2016 and 2021 will be the basis for analyses conducted in class and for the assignments. Students are required to have a background in knowledge of research design, basic descriptive statistics, testing and regression analysis at the undergraduate level. The course will help students develop an intuitive, as well as a more formal understanding of these methods. Although formal language will be used, the course does not require in-depth mathematical knowledge.

**Section1: Student Information (To be completed by the student)**

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Geography Program: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 2: Department Approval**

Dept. Authorization: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date Approved: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\* You will not be enrolled in the course until it has been approved by the department. Complete this

form with the instructor before submitting to the department (Undergraduate Administrator: undergraduate.geography@utoronto.ca, SS 5044).

\*\* Prerequisite: GGR270 or equivalent with minimum grade of 85%.

\*\*\* A maximum of 5 undergraduate students will be accepted.