Rehabilitation Sciences Institute
UNIVERSITY OF TORONTO

External Advanced Research Methods Courses

The following is a list of *External Advanced Research Methods Courses* taken by RSI students since 2018. The course objectives, respective pre-requisites, and an URL to the departmental website to access additional information are provided in the table below. This list provides key examples of advanced research methods courses, but not exhaustive of all course offerings.

Upon enrolment in these courses, RSI students are informed of their waitlist status. This is routine communication from all departments. Of the below courses, irrespective of this automated waitlisted message, RSI students have reserved spots in JRP1000 Theory and Method for Qualitative Researchers and CHL5201/2 Biostatistics I and II. Supervisors can reassure students who are taking JRP, CHL5201 and CHL5202 that they will receive confirmation of their enrolment at the start of the term.

All doctoral supervisors and students are encouraged to meet and discuss advanced research methods course selection.

Code	Quantitative Methods Courses	Term	
CHL5202H	**Biostatistics II** • Analysis where outcome is continuous and exposure and covariates are a mix of continuous and categorical variables (multiple linear regression) • Relaxing linearity assumptions of continuous exposure variables through the use of regression splines • Perform internal validation by means of bootstrapping or cross-validation • Extension to binary outcomes (multiple logistic regression) • Extension to time to event and censored outcomes (survival analysis) • Dealing with missing data • Introduce Bayesian methods	Winter	www.dlsph.utoronto.ca/course/biostatistics-ii/ Pre-requisite: CHL5201 Biostatistics I
CHL5203H	**Survey Design & Social Research Methods in Public Health** • Describe and apply the process required to design a survey. • Write a protocol for survey research including social research methods used to develop the survey. • Critically discuss methods or analytical papers focused on survey design.	Winter	www.dlsph.utoronto.ca/course/survey-design-and-social-research-methods-in-public-health/ Pre-requisite: None listed. It is recommended that students have undergraduate research methods and statistics.

HAD5302H	• **Measurement in Clinical Research** • The students will work through the principles of measurement, and at each stage reflect on this for their chosen measurement instrument and need. The assignment is best done as the course progresses. By the end of the course, students are to apply measurement principles and methods in the critical assessment and development of measures employed in clinical and epidemiological research. Many of our students have published their final assignments.	Winter	https://ihpme.utoronto.ca/course/had5302h/ Pre-requisite: Minimum one half course in research methods (e.g. HAD5301H) One half course in biostatistics (HAD 5307H) or (CHL 5201H) or (MSC 1090H)
HAD5763H	**Advanced Methods in Health Services Research** • To provide students with an understanding of the design and conduct of a range of experimental and non-experimental quantitative research designs applied to HSR. • To further develop an understanding of research methodologies, introducing more complex forms of study design and higher-level methods applicable to HSR.	Fall	https://ihpme.utoronto.ca/course/had5763h/ Pre-requisite: Includes an understanding of basic research design and statistics including regression techniques. See course site for further details.
MHI2007H	**Quantitative Skills in Health Informatics** • The goal is for students to gain experience in practical statistical and data analytics techniques to handle and manage their daily professional tasks.	Fall	ihpme.utoronto.ca/course/mhi2007h/ Pre-requisite: None
HAD5772H	**Intermediate Statistics for Health Services Researchers** • Demonstrate an understanding (both conceptual and practical) of the analysis approaches covered in this course; • Identify appropriate analysis approach(es) to address specific research questions; • Identify appropriate analysis approach(es) to use with data that has already been collected; • Use of the computer program SPSS for data management, statistical exploration and analysis, and understanding and explaining results; • Present analysis results in APA format.	Fall	https://ihpme.utoronto.ca/course/had5772h/ Pre-requisite: A graduate-level, introductory statistics course

Code	Qualitative Methods Courses	Term	
CHL5115H	**Qualitative Analysis and Interpretation** This course aims to develop in students a deeper marvel for, enjoyment of, and skill in qualitative research. At the end of the course students should have made significant progress towards being able to understand and articulate:	Winter	www.dlsph.utoronto.ca/course/qualitative-analysis-and-interpretation/ Pre-requisite: Knowledge of the theoretical and philosophical foundations of qualitative inquiry, and of data generation, is expected

	• What it means to *critically* analyze and interpret qualitative data, including the difference between value-added analysis and primary description. • The role, place, significance and timing of theory in the analysis process • The implications for analysis and interpretation of the data generation, transformation and management process • The complexity and implications of the interpretation of 'meaning' • The role of the researcher in analysis, and the significance of standpoint • The notion, practice and significance of methodological reflexivity, and its role in the research process • The constitutive effects of writing on the analysis, and the different ways of representing the results of qualitative inquiry and their implications • Issues associated with judging research quality in qualitative inquiry • The importance of being able to write and articulate convincingly the nature, value, and limitations of your analytic process and of qualitative methodology more generally.		(e.g., CHL5131, JRP1000, SWK6307, or equivalent). Prior training and/or experience with qualitative research. Own data/research plan to use in the course.
CHL5131H	**Theoretical Foundations for Qualitative Health Research** • To understand paradigms for knowledge production and key theoretical foundations that inform qualitative studies in the health sciences • To describe the link between epistemology and methodology and to show how interpretivist and critical epistemologies are connected to decisions about how social phenomena in the health sciences are studied • To examine well-established and innovative methodologies for qualitative health research • To discuss elements for epistemological and methodological rigour (epistemological congruence) and ethics as process in qualitative health research • To explore qualitative approaches that address individual research interests	Winter	www.dlsph.utoronto.ca/course/theoretical-foundations-of-qualitative-health-research/ Pre-requisite: None listed.
NUR1025H	**Doing Qualitative Research: Design and Data Collection**	Winter	ccqhr.utoronto.ca/education/about-course-series/course-descriptions/

	• Examine the qualitative research process as a series of key decisions with multiple implications related theory, methodology, and methods • Appreciate qualitative design issues associated with establishing goals, sampling, entering the field, coordinating fieldwork, approaches to data collection, and data management • Identify strategies for ensuring rigour in qualitative research design and conduct • Deepen engagement with a methodological perspective that is appropriate for the learner's doctoral research • Practice data collection methods and critically reflect about its data generation possibilities and limits.		Pre-requisite: NUR1024/CHL5131, JRP1000 or equivalent doctoral level qualitative research course.
JRP1000H	**Theory and Method for Qualitative Researchers** • This course aims to provide learners with an introduction to the relationship between theory and method in qualitative inquiry. Learners will be expected to engage in critical reflection and debate of the ideas presented. At the completion of the course learners will: o Appreciate the scope and complexity of qualitative inquiry o Understand the role of theory across the research process o Be familiar with different paradigms and theoretical perspectives in qualitative research o Understand how to choose different data generation techniques and acquire basic skills in their use o Understand the notion and practice of reflexivity and its role in the research process o Understand the various ways that rigour and quality are enhanced in qualitative research o Be familiar with the basics of qualitative analysis o Identify ethical issues related to the use of qualitative methods o Have an introductory understanding of how to write up qualitative research	Winter	www.dlsph.utoronto.ca/course/theory-and-method-for-qualitative-researchers-an-introduction/ Pre-requisite: None. Preference will be given to learners enrolled in a thesis-based graduate program and some knowledge of social theory is beneficial toward success in the course.