2018W Research Methods Courses

CNPS 632 001: Advanced Assessment (3)
Instructor(s): TBA
Term: 2
Day and Time: Tue, 4:30pm-7:30pm
Counselling psychology research and practice in adult personality assessment, including ethics of testing and use with special populations.
Prerequisite: PSYC 303, or EPSE 528 or CNPS 532.

CNPS: 669A 001: Research Approaches to Counselling Psychology (3-6)
Instructor(s): TBA
Term: 1-2
Day and Time: Fri, 9:30am-12:30pm
This course examines the assumptions and methods of major research paradigms, critically assesses a selection of current research, and then uses various approaches to construct research projects.

EDCP 504A 032: Review of Research in Art Education: Theory and Practice (3)
Instructor(s): Dr. Donal O’Donoghue
Term: 2
Day and Time: Mon, 4:30pm-7:30pm
This seminar focuses on art, research and pedagogy. It brings together readings from these three areas of study and practice in an effort to consider an approach to research and inquiry that is informed by contemporary art practice and poststructuralist research methodologies. During this seminar, students will also study the nature of research and scholarship produced in the field of art education over the past decade.

EDCP 513 031: Case-Study Research and Cross-Case Analysis
Instructor(s): Dr. Ann Anderson
Term: 1
Day and Time: Tue, 4:30pm-7:30pm
In this advanced graduate seminar, we will examine case study research as a methodology and heuristic device that permits the study of complex human activities, as they are embedded and bounded in place and time. In this research seminar, we will discuss aspects of, and issues associated with, case study research, as we explore the ways in which case study research is used in educational contexts and the research questions for which it is suited. Our seminar discussions will be informed by readings from various fields, with a focus on education and will explore individual case, multi-case and across-case analyses. The course content is structured around two interwoven strands: the nature of case study research and application of course content to student research interests. Student researchers will learn more about how case study methodology could inform their own work and apply this knowledge to
their individual research projects. This course is suitable for students from across departments and disciplinary areas.

**EDCP 514 031: Arts Based Educational Research (3)**
*Instructor(s):* Dr. Rita Irwin  
*Term:* 1  
*Day and Time:* Tue, 4:30pm-7:30pm  
This course focuses on a/r/tography as a practice based form of inquiry. Drawing from the fields of arts education, aesthetics, the arts, and qualitative and post-qualitative research methodologies, those involved in the course will engage in textual and aesthetic readings, discussions, interpretations, research creations, and presentations as a way to engage in meaningful artistic inquiry as artist/researcher/teachers engaged in living inquiry.

**EDST 501 021: Research Traditions in Educational Administration (3)**
*Instructor(s):* Dr. Wendy Poole  
*Term:* 1  
*Day and Time:* Sat, 9am-4pm  
This course is offered specifically for M.Ed. in Educational Administration and Leadership students.

**EDST 501 61A: Research Traditions in Educational Administration (3)**
*Instructor(s):* Dr. Gerald Fallon  
*Term:* 1  
*Day and Time:* Sat, 8:30am-4:30pm  
This course is offered specifically for M.Ed. in Educational Administration and Leadership students in REA6 cohort ONLY.

**EDST 508A 022: Review of Research in Educational Studies (3)**
*Instructor(s):* Dr. Andre Mazawi  
*Term:* 2  
*Day and Time:* Fri and Sat, 5pm-8pm and 9am-4pm  
This course is offered specifically for 2018 EdD cohort students ONLY.

**EDST 508B 021: Review of Research in Educational Studies-Post Qualitative Research (3)**
*Instructor(s):* Dr. Taylor Webb  
*Term:* 1  
*Day and Time:* Thu, 4:30pm-7:30pm

**EDST 553A 61B: Group Inquiry into Educational Practices (3)**
*Instructor(s):* Dr. Cash Ahenakew  
*Term:* 1  
*Day and Time:* Sat, 9am-4pm
This course is offered specifically for M.Ed. in Educational Administration and Leadership students in NVIT cohort students ONLY.

EDST 553A 022: Group Inquiry into Educational Practices (3)
Instructor(s): Dr. Wendy Poole
Term: 2
Day and Time: Sat, 9am-4pm
This course is offered specifically for M.Ed. in Educational Administration and Leadership students.

EDST 553A 62A: Group Inquiry into Educational Practices (3)
Instructor(s): Dr. Gerald Fallon
Term: 2
Day and Time: Sat, 8:30am-4:30pm
This course is offered specifically for M.Ed. in Educational Administration and Leadership students in REA6 cohort students ONLY.

EDUC 500 001: Research Methodology in Education (3)
Instructor(s): TBA
Term: 1
Day and Time: Mon, 4:30pm-7:30pm

EDUC 500 002: Research Methodology in Education (3)
Instructor(s): TBA
Term: 1
Day and Time: Mon, 4:30pm-7:30pm

EDUC 500 003: Research Methodology in Education (3)
Instructor(s): TBA
Term: 2
Day and Time: Thu, 4:30pm-7:30pm

EDUC 500 004: Research Methodology in Education (3)
Instructor(s): TBA
Term: 2
Day and Time: Tue, 4:30pm-7:30pm

EDUC 500 005: Research Methodology (3)
Instructor(s): Drs. Doug Adler and Sandra Scott
Term: 1
Day and Time: Tue, 4:30pm-7:30pm
Through collaborative inquiry, we will survey research issues and techniques to assist you in selecting methods and strategies for intensive studies as well as for immediate application. This is an introductory
course in understanding and conducting educational research. The course objective is for you to craft a research proposal to support your area of study. The course goal is to provide you with the background necessary for making informed decisions regarding methodologies, methods, and strategies relevant and meaningful to your research interests.

EPSE 481 074: Introduction to Research in Education (3)
Instructor(s): TBA
Term: 2
Day and Time: Wed, 4:30pm-7:30pm
This course is an introduction to the process and practice of research in education. It provides an overview of a variety of educational research methods and introduces both "quantitative" and "qualitative" approaches. In this course, students are assisted to recognize research paradigms as examples of disciplined inquiry, situate various models of inquiry, such as experimental, correlational, and single-subject designs, ethnography, and case studies. Within these models of inquiry, students will be guided to understand, interpret, and critique studies conducted using a variety of methodological approaches, and plan a study with a research design appropriate to a selected research question. The students in this course:
- examine characteristics of different educational research paradigms
- study applications of these research paradigms to different educational problems
- develop skills necessary to conduct a literature review and construct an integrated and critical summary of the literature in a particular area
- develop strategies for understanding, interpreting, and evaluating research articles conducted within a range of research traditions
- identify a research question of interest they would like to investigate
- prepare a research proposal to examine their research question

Prerequisite: Successful completion of EPSE 482 or an introductory level statistics course is a pre- or co-requisite to this course.

EPSE 482 074: Introduction to Statistics for Research in Education (3)
Instructor(s): Dr. Nathan Roberson
Term: 1
Day and Time: Tue, 4:30pm-7:30pm
Statistics is the science of collecting, organizing, and interpreting data. An important aspect of many professions, training in this science is valuable preparation for a variety of careers. This course provides an overview of descriptive and inferential statistics commonly used in educational and psychological research. Students successfully completing this course should be able to comprehend the assumptions, limitations, and uses of statistical methods; compute and interpret descriptive and selected inferential statistics; comprehend research that reports frequencies, means, t-tests, F-tests, and nonparametric tests; engage in statistical thinking; and develop a positive attitude towards the use of statistical methods. The key concepts include data displays, descriptive statistics, variance, standardized distributions, sampling, probability distributions, sampling error, hypothesis testing, t and F-tests for
comparing independent and dependent means, comparing proportions, correlation, and simple linear regression.

**Prerequisites:** Grade 12 algebra/math. A college level course in mathematics or statistics will be a definite advantage.

**EPSE 482 075: Introduction to Statistics for Research in Education (3)**

*Instructor(s):* TBA  
*Term:* 2  
*Day and Time:* Tue, 4:30pm-7:30pm  
Statistics is the science of collecting, organizing, and interpreting data. An important aspect of many professions, training in this science is valuable preparation for a variety of careers. This course provides an overview of descriptive and inferential statistics commonly used in educational and psychological research. Students successfully completing this course should be able to comprehend the assumptions, limitations, and uses of statistical methods; compute and interpret descriptive and selected inferential statistics; comprehend research that reports frequencies, means, t-tests, F-tests, and nonparametric tests; engage in statistical thinking; and develop a positive attitude towards the use of statistical methods. The key concepts include data displays, descriptive statistics, variance, standardized distributions, sampling, probability distributions, sampling error, hypothesis testing, t and F-tests for comparing independent and dependent means, comparing proportions, correlation, and simple linear regression.  

**Prerequisites:** Grade 12 algebra/math. A college level course in mathematics or statistics will be a definite advantage.

**EPSE 483 074: Reading and Interpreting Research in Education (3)**

*Instructor(s):* Dr. Jake Stone  
*Term:* 1  
*Day and Time:* web-oriented course  
This course is an introductory research methods course for MEd students who are being trained as consumers rather than producers of educational research. Therefore, the course focuses on developing skills for locating, understanding, interpreting and critiquing education research. The course provides an overview of research design and process, introduces the concepts and skills involved in understanding and analyzing research in education, and provides an overview of basic, general knowledge of various research methodologies. Objectives of the course include the following:  
- develop library search skills and knowledge about resources for locating research articles and reports  
- understand the relationship between research questions, designs and methodologies  
- understand different research designs and methods such as correlational, experimental, ethnographic  
- understand and interpret statistical data and findings  
- understand and critique research methodologies and analyses  
- develop skills to analyze and critique articles  
- understand and apply concepts of validity and validity evidence in understanding and critiquing research reports  

**Prerequisites:** No prerequisites. This course may not be used as a prerequisite to EPSE 592 or EPSE 596.
EPSE 528 075: Basic Principles of Measurement (3)
Instructor(s): Dr. Anita Hubley
Term: 1
Day and Time: Wed, 9:30am-12:30pm
This course provides an introduction to educational and psychological measurement. This is not a statistics course and it provides more in-depth coverage of measurement, reliability, validity, and theory than what is covered by typical ‘tests and measures’ courses. Four areas will be emphasized:
- principles of measurement theory (e.g., reliability, validity),
- applications of classical test theory and item response theory to real world measurement problems,
- historical and social context of testing and measurement,
- learning how to make use of measurement information when selecting and evaluating items and measures.
This course is highly recommended for anyone planning to pursue applied, clinical, or research studies/careers involving the use or development of tests or measures.
Prerequisites: Successful completion of EPSE 482 or an equivalent undergraduate statistics course.

EPSE 591 075: Theory and Practice of Program Evaluation (3)
Instructor(s): Dr. Sandra Mathison
Term: 1
Day and Time: Mon, 4:30pm-7:30pm
The purpose of the course is to provide an understanding of evaluation—as a discipline, as a profession, as a process and a product in a wide range of educational and social contexts. The primary focus of the course is program evaluation rather than the assessment of individuals (for example, the measurement of student achievement or personnel review). The course focuses on developing an understanding of the logic of evaluative thinking, the nature of evaluation as a profession and discipline, the knowledge and skills needed to be expert consumers of program evaluation and novice evaluators in contexts relevant to individual topical interests. Upon completion of the course, students will be able to:
1) Describe the logic of evaluation; 2) Understand and be able to use the central concepts in evaluation; 3) Be familiar with major approaches to evaluation; 4) Be aware of standards in evaluation, including ethical practices for evaluators; and 5) Understand the social and political nature of evaluation.

EPSE 592 074: Experimental Designs and Analysis in Educational Research (3)
Instructor(s): TBA
Term: 1
Day and Time: Wed, 4:30pm-7:30pm
Most research in the social sciences (e.g., education, psychology) uses either correlation or quasi-experimental designs. Correlation designs are taught in EPSE 596. In EPSE 592, the focus is on
experimental and quasi-experimental designs, how to analyze and interpret data obtained from such
designs, and how to describe results from these analyses using proper format.
Researchers are frequently interested answering questions that involve comparing two or more groups
(e.g., sex differences, compare age or education groups, compare control vs. intervention groups). The
course will cover various analyses of variance (ANOVA) techniques designed to answer such questions
(e.g., one-way ANOVA, two-way ANOVA, repeated measures ANOVA, mixed model ANOVA, ANCOVA) as
well as their assumptions, nonparametric alternatives, and relevant effect size indicators. Other related
topics, such as sample size and power calculations, three-way ANOVAs and MANOVA, may be included
as time permits. Analyses will be conducted using SPSS.
**Prerequisites:** Successful completion of EPSE 482 or an equivalent course in undergraduate statistics.
EPSE 483 is not an acceptable prerequisite course.

EPSE 592 075: Experimental Designs and Analysis in Educational Research (3)
*Instructor(s):* Dr. Amery Wu
*Term:* 2
*Day and Time:* Thu, 4:30pm-7:30pm
Most research in the social sciences (e.g., education, psychology) uses either correlation or quasi-
experimental designs. Correlation designs are taught in EPSE 596. In EPSE 592, the focus is on
experimental and quasi-experimental designs, how to analyze and interpret data obtained from such
designs, and how to describe results from these analyses using proper format.
Researchers are frequently interested answering questions that involve comparing two or more groups
(e.g., sex differences, compare age or education groups, compare control vs. intervention groups). The
course will cover various analyses of variance (ANOVA) techniques designed to answer such questions
(e.g., one-way ANOVA, two-way ANOVA, repeated measures ANOVA, mixed model ANOVA, ANCOVA) as
well as their assumptions, nonparametric alternatives, and relevant effect size indicators. Other related
topics, such as sample size and power calculations, three-way ANOVAs and MANOVA, may be included
as time permits. Analyses will be conducted using SPSS.
**Prerequisites:** Successful completion of EPSE 482 or an equivalent course in undergraduate statistics.
EPSE 483 is not an acceptable prerequisite course.

EPSE 592 090: Experimental Designs and Analysis in Educational Research (3)
*Instructor(s):* TBA
*Term:* 1
*Day and Time:* Fri, 1:00pm-4:00pm
Most research in the social sciences (e.g., education, psychology) uses either correlation or quasi-
experimental designs. Correlation designs are taught in EPSE 596. In EPSE 592, the focus is on
experimental and quasi-experimental designs, how to analyze and interpret data obtained from such
designs, and how to describe results from these analyses using proper format.
Researchers are frequently interested answering questions that involve comparing two or more groups
(e.g., sex differences, compare age or education groups, compare control vs. intervention groups). The
course will cover various analyses of variance (ANOVA) techniques designed to answer such questions
(e.g., one-way ANOVA, two-way ANOVA, repeated measures ANOVA, mixed model ANOVA, ANCOVA) as
well as their assumptions, nonparametric alternatives, and relevant effect size indicators. Other related topics, such as sample size and power calculations, three-way ANOVAs and MANOVA, may be included as time permits. Analyses will be conducted using SPSS.

**Prerequisites:** Successful completion of EPSE 482 or an equivalent course in undergraduate statistics. EPSE 483 is not an acceptable prerequisite course.

**EPSE 593 074: Design and Analysis of Research with Small Samples and Single Subjects (3)**

*Instructor(s):* TBA  
*Term:* 1  
*Day and Time:* Wed, 4:30pm-7:30pm  

Single subject research is a scientific methodology that allows researchers to conduct a true experiment with one or a small number of subjects. It has played a central role in the development of evidence-based interventions in the fields of special education, clinical psychology, school psychology, counselling psychology, rehabilitation sciences, and audiology and speech sciences. The course focuses on procedures and issues related to the design, implementation and analysis of single subject research. The course covers general methodological information as well as specific details about single subject research designs and the use of single subject methods in applied settings. Issues and applications of statistical procedures to single subject, time series data will also be introduced. As a function of participating in the course, students will be able to:  
- design and apply single subject research procedures to address research questions and issues in special education, school psychology, counselling psychology, clinical psychology, rehabilitation sciences, or audiology and speech sciences  
- analyze and interpret data collected with single subject research procedures  
- discuss contexts in which statistical analysis of time series data is appropriate or necessary and describe methods for conducting such an analysis  
- design community-based single subject research that balances the need for scientific rigor with equal need for social relevance.

**EPSE 594 074: Meta-Analysis: Quantitative Research Synthesis (3)**

*Instructor(s):* TBA  
*Term:* 2  
*Day and Time:* Thu, 4:30pm-7:30pm  

Meta-analysis is a type of systemic review that uses techniques to systematically combine and summarize the statistical results of research in any field. Summarizing existing research is a necessary endeavour in the scientific process. An understanding of how to evaluate and conduct a meta-analysis is of vital importance to today’s researchers. The focus in this course is on current methods and techniques for calculating and analyzing study effect sizes. The course covers the entire meta-analytic process: problem formulation, data collection, data evaluation, analysis and interpretation, and presentation of results. Various effect size measures are studied. Methods of combining effect sizes and the use of moderator variables are extensively examined. Students learn practical skills and complete an actual meta-analysis project that can be used as a start towards their thesis/dissertation.

**Prerequisites:** Successful completion of EPSE 592 and/or EPSE 596 or equivalent courses.
EPSE 595 074: Qualitative Research Methods (3)

Instructor(s): Dr. Sandra Mathison

Term: 1

Day and Time: Wed, 4:30pm-7:30pm

This is an introductory research course focusing especially on interpretive and critical approaches to social science and educational research, what is often called qualitative research. There are no prerequisites for this course so it is appropriate for both masters and doctoral students who are making an initial foray into qualitative research. As an introductory course, the purpose is to explore philosophical and practical aspects of research that will help students in deciding if this research approach ‘works’ for them and to open the door to more advanced course work in interpretive and critical research.

The course begins with a brief philosophical introduction to the foundational ideas in post-positivism and interpretivism that underpin alternative research methodologies and methods. Students will be encouraged to reflect on and come to new understandings about their epistemologies as they learn about interpretive research approaches. The course will provide hands-on activities in data collection and analysis methods that are generic for many interpretive research approaches—focusing especially on participant observation, individual and group in-depth interviewing, and material culture. While the course does not focus in depth on any specific methodology, students will be introduced to a wide range of methodological approaches. Other topics such as ethics and politics of research will discussed, particularly in relation to qualitative research. By reading exemplary examples of interpretive and critical research studies, students will be exposed to models for excellent research within this tradition.

Prerequisites: None

Heading 1:
MERM MEd Required Courses (12 credits):

Heading 2:
MERM MA Required Courses (12 credits):

EPSE 595 075: Dr. Qualitative Research Methods (3)

Instructor(s): Dr. Sandra Mathison

Term: 2

Day and Time: Wed, 1:00pm-4:00pm

This is an introductory research course focusing especially on interpretive and critical approaches to social science and educational research, what is often called qualitative research. There are no prerequisites for this course so it is appropriate for both masters and doctoral students who are making an initial foray into qualitative research. As an introductory course, the purpose is to explore philosophical and practical aspects of research that will help students in deciding if this research approach ‘works’ for them and to open the door to more advanced course work in interpretive and critical research.

The course begins with a brief philosophical introduction to the foundational ideas in post-positivism and interpretivism that underpin alternative research methodologies and methods. Students will be encouraged to reflect on and come to new understandings about their epistemologies as they learn
about interpretive research approaches. The course will provide hands-on activities in data collection and analysis methods that are generic for many interpretive research approaches—focusing especially on participant observation, individual and group in-depth interviewing, and material culture. While the course does not focus in depth on any specific methodology, students will be introduced to a wide range of methodological approaches. Other topics such as ethics and politics of research will discussed, particularly in relation to qualitative research. By reading exemplary examples of interpretive and critical research studies, students will be exposed to models for excellent research within this tradition.

**Prerequisites:** None

**EPSE 596 074: Correlational Designs and Analysis in Educational Research (3)**

*Instructor:* Dr. Amery Wu  
*Term:* 1  
*Day and Time:* Thu, 4:30pm-7:30pm

The goal of the course is to enable students to build and evaluate statistical models for the analysis and interpretation of data in the behavioural sciences. The focus is on methods of statistical modelling of data and practical decision-making, rather than on statistical theory per se. Simple linear and nonlinear regression, multiple regression, and logistic regression are the main topics. IBM SPSS software is used. Regression is a highly general and very flexible data analytic framework in which to examine phenomena in the behavioural sciences. It can be used to predict or to explain relationships between an outcome variable and predictors or explanatory variables of interest. Both continuous and categorical variables of the kind typically studied in psychology and education can be accommodated.

Students successfully completing this course should be able to comprehend the assumptions, limitations, and uses of correlational and regression analysis; compute and interpret regression solutions for non-experimental and experimental designs; conceptualize, analyze, and interpret path models including mediators and moderators; evaluate publications and compose research reports incorporating correlational and regression analyses.

**Prerequisites:** Successful completion of EPSE 482 is required. Successful completion of EPSE 592 is highly recommended.

**EPSE 596 090: Correlational Designs and Analysis in Educational Research (3)**

*Instructor:* Dr. Yan Liu  
*Term:* 2  
*Day and Time:* Wed, 9:30am-12:30pm
The goal of the course is to enable students to build and evaluate statistical models for the analysis and interpretation of data in the behavioural sciences. The focus is on methods of statistical modelling of data and practical decision-making, rather than on statistical theory per se.

Simple linear and nonlinear regression, multiple regression, and logistic regression are the main topics. IBM SPSS software is used. Regression is a highly general and very flexible data analytic framework in which to examine phenomena in the behavioural sciences. It can be used to predict or to explain relationships between an outcome variable and predictors or explanatory variables of interest. Both continuous and categorical variables of the kind typically studied in psychology and education can be accommodated.

Students successfully completing this course should be able to comprehend the assumptions, limitations, and uses of correlational and regression analysis; compute and interpret regression solutions for non-experimental and experimental designs; conceptualize, analyze, and interpret path models including mediators and moderators; evaluate publications and compose research reports incorporating correlational and regression analyses.

**Prerequisites:** Successful completion of EPSE 482 is required. Successful completion of EPSE 592 is highly recommended.

**Heading 1:**
MERM MEd Required Courses (12 credits):

**Heading 2:**
MERM MA Required Courses (12 credits):

**EPSE 597 075: Factor Analysis and Structural Equation Modeling (3)**
*Instructor(s):* Dr. Amery Wu  
*Term:* 1  
*Day and Time:* Tue, 1:00pm-4:00pm  
Phenomena of research interest in social and behavioral sciences are often constructs (underlying concepts such as self-esteem and empathy) investigated as a form of latent variable. A latent variable is a variable where its values are unobserved, rather than indicated by the observed variables. This course introduces the basics of latent variable modeling. Students will learn exploratory and confirmatory factor analysis, i.e., measurement models that stipulate and test the relationships between the observed indicators and the latent variables. Students will also learn how to investigate direct, mediational, and moderational relationships among latent variables by specifying and testing structural models, i.e., regression analyses among latent variables. Fundamentals of modeling “means and covariances structure” of multivariate data will be explained in modes of lectures of theories, real data examples, and hand-on exercises with a variety of R statistical packages.

**Prerequisites:** Successful completion of EPSE 592 and EPSE 596, or at least two courses (one of which must be a graduate course) in statistics and/or data analysis.

*Instructor(s):* Dr. Sandra Mathison  
*Term:* 2
Day and Time: Thu, 4:30pm-7:30pm
Narratives take many forms (spoken, written, performed) and occur in a variety of situations (conversations, political speeches, media, online forums, social interactions) and at many levels (individual, community, nation states). Narratives are told by a single speaker, co-constructed by interlocutors, or manifest in cultural artifacts. Narratives can unfold in a single context or be developed across different settings and sites of interaction. Narrative analysis examines how social life is conceptualized in the form of stories, with characters, plot structures and time boundaries, and in both descriptive and critical ways. This is an advanced seminar for doctoral students. This course will focus on the philosophical and technical aspects of narrative inquiry, including:
- the origins of narrative inquiry in life histories (such as: Znaniecki’s *The Polish Peasant*, Goffman’s *Presentation of Self in Everyday Life*, Garfinkel’s study of Agnes),
- the philosophical grounding of narrative inquiry (such as the historical roots of narrative inquiry in German idealism, Bruner’s conception of narrative knowledge, Ricoeur’s conception of time, and John Dewey’s notions of experience), and
- the pragmatics of doing narrative inquiry.
Prerequisite: EPSE 595 or equivalent

**EPSE 681C 090: Advanced Topics in Measurement, Evaluation, and Research Methodology:**
**Quantitative Methods Topic: A Second Course on Structural Equation Modeling (3)**
Instructor(s): Dr. Amery Wu
Term: 2
**Day and Time:** Mon, 1:00pm-4:00pm
This is a second course on structural equation modeling (SEM). This course covers popular SEM methods that cannot be covered within the timeline of EPSE 597. It will also cover recent new developments in SEM as well as more refined and advanced models that answer more in-depth and insightful research questions. The topics may include categorical latent variables (latent class analysis) and their moderation and mediation, mixture models (population heterogeneity), exploratory SEM, multilevel and multigroup SEM, non-linear growth and change models, etc. Because this doctoral level course is in a format of seminar, students are expected to take an active role in learning the materials and a participatory role in exchanging their hands-on projects as discussed with the instructor.
Prerequisite: EPSE 597 or equivalent

**EPSE 683 075: Heirarchical Linear Modeling, Growth, and Change (3)**
Instructor(s): Dr. Yan Liu
Term: 1
**Day and Time:** Fri, 1:00pm-4:00pm
Hierarchical linear modeling (HLM) is an analytical method useful for research in education, psychology, medicine, health, sociology and other applied sciences where data are collected through institutions (e.g., schools and hospitals, households). HLM is also a useful tool for analyzing data collected from longitudinal research that is designed to investigate growth and change over time. Multilevel models take into account observation dependence, a violation to the assumption of regular regression methods. Students will learn the basic theory of multilevel models and will have ample opportunities to apply the
methods to real data sets from different disciplines. Topics include data management, two-level models, growth and change models, and generalized linear multilevel models. Methods for both continuous and binary outcomes will be covered.

**Prerequisites:** Successful completion of EPSE 592 and EPSE 596, or at least two courses (one of which must be a graduate course) in statistics and/or data analysis.

**KIN 570 001: Research Methods in Kinesiology (3)**
*Instructor(s):* TBA  
*Term:* 2  
*Day and Time:* Wed, 9:30am-12:30pm  
Research methods applied to the study of sport and physical activity, the nature of scientific inquiry, the design of experiments, the survey as a research medium, the historical and philosophical methods of inquiry, the writing of the research report.

**KIN 571 001: Qualitative Methods in Sports, Leisure, and Health Studies (3)**
*Instructor(s):* TBA  
*Term:* 2  
*Day and Time:* Fri, 9:30am-12:30pm  
The goals of this course are: (1) to consider and examine what qualitative research methods are and how and when they are best utilized; (2) to consider and engage key theoretical, methodological, and ethical debates about and approaches to qualitative inquiry; (3) to use practical exercises doing qualitative research as a basis for discussion about the variety of ‘field research’ techniques and for considering challenges faced by those working ‘in the field’; (4) to consider the various strategies and criteria for critically examining qualitative research studies; and (5) to offer relevant support and background for students in their development of a research proposal. The ultimate aim is to give students the opportunity to attain a working understanding of the various research techniques commonly adopted by qualitative researchers and to develop the knowledge base and skills needed to design, defend, and rationalize an original research proposal. The course is designed especially for students interested in qualitative research conducted within the ‘sociology of sport and leisure’ and the ‘sociology of health’ fields, and the methodological debates and discussions that are featured within these fields.

**LLED 526 061: Second Language Assessment: Conceptual and Empirical Approaches (3)**
*Instructor(s):* Dr. Monique Bournot-Trites  
*Term:* 1  
*Day and Time:* Mon, 4:30pm-7:30pm