<table>
<thead>
<tr>
<th>No.</th>
<th>Course code &amp; title</th>
<th>Teacher(s)</th>
<th>Minimum requirement for attendance</th>
<th>Pre-requisite</th>
<th>Duration</th>
<th>Semester</th>
<th>Tentative schedule</th>
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</table>
| 1   | EDUR6010 Qualitative Research Methods I* (Class A) | M Chian and J Jung | 100% | Nil | 3 hours x 5 sessions | Semester 2 | Date: Jan 19, 26; Feb 2, 9 and 23, 2021 (Tue)  
      |                     |            |                |               |          | Time: 6:30-9:30p.m. 
      |                     |            |                |               |          | Venue: TBC |
| 2   | EDUR6010 Qualitative Research Methods I* (Class B) | M Chian and J Jung | 100% | Nil | 3 hours x 5 sessions | Semester 2 | Date: Jan 23, 30; Feb 6, 20 and 27, 2021 (Sat)  
      |                     |            |                |               |          | Time: 10:00a.m.-1:00p.m. 
      |                     |            |                |               |          | Venue: TBC |
| 3   | EDUR6011 Qualitative Research Methods II* | M Chian and J Jung | 100% | EDUR6010 Qualitative Research Methods I | 3 hours x 6 sessions | Semester 2 | Date: Mar 2, 9, 23, 30; Apr 20 and 27, 2021 (Tue)  
      |                     |            |                |               |          | Time: 6:30-9:30p.m. 
      |                     |            |                |               |          | Venue: TBC |
| 4   | EDUR6020 Quantitative Research Methods I* (Class A) | G Chen | Nil | Nil | 3 hours x 5 sessions | Semester 1 | Date: Nov 17, 24; Dec 1, 8 and 15, 2020 (Tue)  
      |                     |            |                |               |          | Time: 6:30-9:30p.m. 
      |                     |            |                |               |          | Mode of teaching: Online |
| 5   | EDUR6020 Quantitative Research Methods I* (Class B) | G Chen | Nil | Nil | 3 hours x 5 sessions | Semester 2 | Date: Jan 20, 27; Feb 3, 10 and 24, 2021 (Wed)  
      |                     |            |                |               |          | Time: 6:30-9:30p.m. 
      |                     |            |                |               |          | Venue: TBC |
| 6   | EDUR6021 Quantitative Research Methods II* | G Chen | Nil | EDUR6020 Quantitative Research Methods I or equivalent | 3 hours x 6 sessions | Semester 2 | Date: Mar 3, 10, 17, 24; Apr 21 and 28, 2021 (Wed)  
      |                     |            |                |               |          | Time: 6:30-9:30p.m. 
      |                     |            |                |               |          | Venue: TBC |

* Revised syllabus subject to Senate’s approval
Teacher(s):
Dr Monaliza Maximo Chian and Dr Jisun Jung

Objectives:
The purpose of this course is to introduce postgraduate research students to the field of qualitative research and prepare them in the knowledge and skills necessary to undertake independent research using qualitative research methodology. In the course, students will learn about the historical and philosophical foundations of qualitative research methodology and be introduced to key research methods and principles for research design in qualitative research. The course aims at providing students with a foundation in the theoretical underpinnings of qualitative research. Of particular importance is to help research students to develop a clear understanding of how qualitative research is not just about a set of research methods and techniques but is in fact underpinned by a whole host of theoretical ways of thinking about social and educational phenomena—i.e., theories about the nature of social reality (‘ontology’) and how we can gain knowledge of social reality (‘epistemology’). The concepts of ontology and epistemology will be introduced to help research students to examine different ways of asking what their research is really about intending to develop strategies on how to plan and design their research. It aims at helping them to develop their research questions and to connect their research questions to their philosophical and methodological perspectives and positions, as well as to link their research questions to appropriate methods of data generation and analysis.

Pre-requisite:
Nil

Minimum requirement for attendance:
100% (Full attendance of the 5 sessions in the course is required.

Course structure:
15 hours in total (Five 3-hours sessions)

Delivery Mode:
Teacher input; class / group discussions and presentations

Required readings:


Recommended readings:


Outcomes:

At the end of the course, students should be able to:
1. Understand the historical and philosophical foundations of qualitative research methodology
2. Explore the nature of qualitative research methodology
3. Develop and articulate their own ontological and epistemological perspectives and positions
4. Develop and articulate their research questions in their chosen area of study
5. Make connections between their research questions and their own ontological and epistemological positions
6. Critically reflect on and articulate their own researcher positionality
7. Make connections between their research questions and appropriate methods of data generation and data analysis
8. Collaborate with researchers from different disciplines to identify a common research topic and construct a research design by using qualitative research approaches
9. Evaluate critically published works based on qualitative research methods

Session 1: Introduction to qualitative research method

In this session, we aim to have a basic understanding of qualitative research methods in educational research. We will ask basic questions such as what is qualitative research; what are the reasons for using qualitative research; what are the characteristics of qualitative research; how is qualitative
research different from quantitative; what are strengths and limitations of qualitative research; and how would you apply qualitative research method for your research?

Students will form a small group and select a particular research topic/approach to conduct an in-depth study (i.e., history, theoretical underpinnings, types of sources of data, participants, settings/contexts, methods of data collection and analysis, etc.) to present in Session 5. Students are encouraged to form the group based on different specialism in order to apply an interdisciplinary approach in identifying their research topics and construct research designs.

**Required readings:**


**Session 2: Qualitative data collection methods**

In this session, we will focus on various qualitative research approaches and data collection methods, including biography or narrative research, phenomenology, grounded theory, ethnography, case study, and action research. We will also discuss how to establish validity, reliability, and authenticity in qualitative data collection.

**Required readings:**


**Session 3: Unpacking qualitative research designs across disciplines**

In this session, we will focus on the relationship between the “four blocks” of qualitative research in education: ontology, epistemology, methodology, and methods. Students will unpack self-selected published articles relevant to their research topic of interests or within their discipline of study and conduct a critical analysis of the logic-of-inquiry and analysis and interpretation of the research study. Guidelines on how to understand the argument and methodological frameworks of the research study as well as to examine theory-method-practice relationships, derived from an ethnographic perspective, will be discussed and be provided for students to conduct the analysis their self-selected published article.

**Required readings:**


**Recommended readings:**
Session 4: Exploring the principles and practices in conducting a qualitative research study

In this session, we will explore the processes and practices in conducting a qualitative research. We will discuss guidelines and strategies in undertaking qualitative research from (re)formulating qualitative research questions, conducting literature reviews, deciding on types of data to collect and collecting, organizing, managing, representing, and analyzing data as well as interpreting the analysis and communicating the research study. Ethical issues in qualitative research will be discussed.

Required readings:


Recommended readings:

Session 5: Judging and evaluating qualitative research studies, and sharing research methodologies (Poster group presentation)

This session will be divided into two parts. In the first half of the session, we will investigate ways of judging, evaluating, and sharing of research studies. We will review and reflect on our exploration and inquiry into what counts as “qualitative research” as well as the challenges and considerations in designing a qualitative research study. In the latter part of the session, the students will participate in a structured poster presentation whereby they share their self-selected in-depth research on a particular research methodology. The instructors will facilitate discussion based on the group presentations.

Required readings:

Recommended readings:

Assessment:

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A critical reflection/analysis (60%)

A critical reflection/analysis (around 1,200-1,500 words) in which you undertake a detailed critical reflection on a published study or critical analysis of your own MPhil/PhD study in your own area of research. The following questions may guide your critical reflection or analysis (“you” refers to “you” or “the author(s) of the published study):

1. Social ‘Reality’: The researcher’s ontological assumptions
What is the nature of the phenomena, or social ‘reality’, that you want to investigate? What are your assumptions about the social ‘reality’?
e.g. what is the nature of “learning strategy”, “self-esteem” or “teacher identity”? e.g. what is the nature of “cultural norms”?

2. Knowledge and Evidence: The researcher’s epistemological assumptions

2a. The Broad Research Area
What topic, or broad substantive area, is the research concerned with?
e.g. education psychology (e.g. learners’ cognitive styles);
e.g., sociology of education (e.g., reproduction of social class in the schooling system)

2b. The Knowledge Claims
What do you want to explain or explore? What is the nature of the intellectual puzzle?
e.g., Is there a causal relationship between an innovative pedagogical approach and students’ performance in specific assessment tasks?
e.g., What are the unspoken cultural norms in a classroom community?

What kinds of knowledge claims are being made in the study (see Core Reading--Heap, 1995)?
e.g., empirical claims? logical claims? normative claims?

What counts as data and evidence (or ‘warrants’) in making this kind of knowledge claims?
e.g., videotaped and transcribed classroom interaction data
e.g., scores on a battery of tests
e.g., audiotaped and transcribed interview data
e.g., teacher lesson-video stimulated commentaries (audiotaped and transcribed)

3. Formulation of the Research Questions
What are the research questions? Are they well-formulated?

Analytical questions may include:
- Are the research questions consistent with each other, and linked to each other? Do they add up to a sensible whole?
- Are they coherent and transparent? Can someone other than the researcher understand them?
- Do they make possible, and probable, intellectually stimulating answers or arguments?
- Are they original and worth asking, as well as grounded in an understanding of the relevant background literature?

4. Connections Between Research Questions and Research Methods
Which of the research questions does each method or data source help you to address?
Analytical questions may include:

- What data sources and methods of data generation were used?
- What can these methods and sources tell you? Which phenomena and components or properties of social ‘reality’ can these data sources and methods help you to address (ontologically)?
- What kinds of warrants (e.g., what counts as evidence) were used to support your claims (epistemologically)?
- Which of the research questions could different kinds of data help you to address?

5. The researcher’s Aims/Purpose & Positionality

What seems to be the aims/purpose and positionality of the researcher?

Analytical questions may include:

- What is the purpose of the research? Which (socioeconomic, sociocultural and sociopolitical) position do you seem to be speaking from as a researcher?
- What kind (s) of interest do you seem to have (See Core Reading—Lin, 2015)?
- What kind(s) of knowledge do you produce; what are the likely kind(s) of impact, and for whom? Whose voice(s) are heard in this research article/thesis? Whose voices are erased?

Group poster presentation (40%)

Students will experience the research poster presentation by groups. From the first session, each group (from different specialism) develop their common research interests, identify their research questions, and design the research using qualitative research methods. In the group poster presentation, students are expected to use appropriate evidence and presentation modes and develop their communication and collaboration skills. The poster presentation will be assessed by the following criteria.

- Articulation of problem, purpose, or focus
- Scholarly context
- Application of scholarly method/technique to project design
- Analysis or interpretation
- Implications/impact
- Quality of delivery

(Version: July 26, 2020)
THE UNIVERSITY OF HONG KONG
FACULTY OF EDUCATION

EDUR6011 Qualitative Research Methods II
(Semester 2, 2020-21)

Teacher(s):
Dr Monaliza Maximo Chian and Dr Jisun Jung

Objectives:
This course aims at introducing the principles and practices in conducting qualitative research in education. Six popular qualitative research approaches: ethnography, grounded theory, case study, document analysis, internet-based research, and mixed methods will be explored across the sessions. The ontological and epistemological differences between different approaches, methodologies, and methods, as well as the challenges of mixing/integrating methods (e.g., in case studies, mixed-methods) will be examined. Students will be apprenticed in four main types of interpretivist research methods of data collection: conducting fieldwork (participant-observation, video records), interviews (individual, group, virtual interviews and focus group interviews), internet-based methods, and documentary methods. Students will be introduced in the various ways of conducting data analysis and interpretation: classroom discourse analysis, narrative analysis, document analysis, video analysis.

Two main theoretical understandings underpin the course: (1) that data is not simply “collected” but are actively generated and co-constructed in contexts with the researcher implicated in the process, and (2) that the central research task concerns the alignment of theory, methodology, methods (i.e., the process of selection of data sources and its justification); the process of data representation and analysis; and the logical construction of convincing arguments); analysis and interpretation to the research question(s). The ethical practices of conducting research will also be discussed with examples.

Pre-requisite:
EDUR6010 Qualitative Research Methods I

Minimum requirement for attendance:
100% (Full attendance of the 6 sessions in the course is required).

Course structure:
18 hours in total (Six 3-hours sessions)

Delivery Mode:
Teacher input; class/group discussions and activities

Course Schedule & Topics:

### Session 1: Ethnography, fieldwork, and video analysis
In this session, we will focus on ethnography as a qualitative research approach. Characteristics, advantages, and limitations of ethnography will be introduced. Different variations of ethnography will be examined with examples in educational research settings. The students will practice in conducting an ethnographic observation, a form of fieldwork, and preliminary video analysis. Epistemological principles, challenges, and pragmatic practices in conducting fieldwork and video analysis will be discussed.

Required Readings:

**Recommended Readings:**

**Deeper Readings:**

**Session 2: Grounded Theory, face-to-face in-depth interview, narrative analysis**
In this session, we will focus on grounded theory as a qualitative research approach. Characteristics, advantages, and limitations of grounded theory will be introduced. Different types of grounded theory will be examined with examples in educational research settings. The students will practice conducting a face-to-face interview and preliminary narrative analysis. Epistemological principles, challenges, and pragmatic practices in conducting an individual face-to-face interview and narrative analysis will be discussed.

**Required Readings**

**Recommended Readings:**

**Deeper Readings:**
Session 3: Document analysis
In this session, we shall focus on document analysis as a qualitative research method. The nature and forms of documents will be introduced; the advantages and limitations of document analysis will be discussed. Specific examples of the use of documents in the research process will be shared.

Core readings:

Session 4: Case study
In this session, we will focus on case study as a qualitative research method. Characteristics, advantages, and limitations of case study will be introduced. Different types of case study designs will be examined with examples in educational research settings.

Core readings:

Session 5: Internet-based research and social media, virtual interviews, discourse analysis
In this session, we will focus on internet-based as a qualitative research approach. Characteristics, advantages, and limitations of internet-based methodology will be introduced. Different forms of internet-based research will be examined with examples in educational research setting. The students will conduct a virtual interview before attending this class session and preliminary a form of discourse analysis. Epistemological principles, challenges, and pragmatic practices in conducting a virtual interview and discourse analysis will be discussed.

Required Readings:

Recommended Readings:

Deeper Readings:

Session 6: Mixed methods research, focus groups/group interviews, discourse analysis
In this session, we will focus on mixed methods as an alternative research approach. Characteristics, advantages, and limitations of mixed methods will be introduced. Different configurations of mixed methods will be examined with examples in educational research setting. The students will practice in conducting a focus group interview and conducting discourse analysis. Epistemological principles,
challenges, and pragmatic practices in conducting focus group interviews and discourse analysis will be discussed.

**Required Readings:**


**Recommended Readings:**
Two texts on Classroom Discourse, by Judith Green & Carol Dixon
[http://www.skeptron.uu.se/broady/sec/p-greendixon.htm](http://www.skeptron.uu.se/broady/sec/p-greendixon.htm) (please click on the link to download the 2 articles)

**Deeper Readings:**

**Course materials:**
Lecture materials (e.g., readings and ppts) will be provided and are available from the course Moodle before each respective session. Please download, print, preview, and bring the lecture slides, readings, and handouts to class.

**Core Readings:**
Students will be assigned some core readings for each session. Please visit the course Moodle for the readings and complete the required readings (and tasks) before coming to class.

**Useful Supplementary References:**
These will be posted on the course Moodle site and will also be provided in each of the sessions. Students are expected to visit the Moodle site regularly for updates on references and course materials.

**Outcomes:**
When you have successfully completed the course, you should be able to:
1. Compare and contrast different qualitative research methodologies and methods and discuss their ontological and epistemological assumptions
2. Link your research questions to different data sources and methods and provide justifications for your decisions and discussion of ethical issues
3. Conduct video analysis, narrative analysis, document analysis, and discourse analysis of samples of qualitative data
4. Practice collecting qualitative data that include ethnographic observation and interviews (face-to-face individual, group, virtual).
5. Develop your logic of inquiry, conduct data analysis, and build convincing arguments based on your data analysis.
6. Evaluate critically published works based on qualitative research methods

**Assessment (100%):**
**Due Date of Assignment: TBC, submit to Turnitin on Moodle site**

The summative assessment will consist of a critical analysis report (1800-2300 words). More guidelines are provided below.
A data analysis report (1800-2300 words) (exclusive of references and appendixes) in which you undertake and write up a detailed analysis of some qualitative research data (e.g., classroom data, interview data) using the research concepts and methods introduced in the course. You need to make a connection between your data analysis and your research question, showing how your data analysis can yield knowledge that addresses your research question. If you do not have your own data yet, you can conduct a critical analysis of a published article or a dissertation examining the data analysis and logic of inquiry in the study. Please forward your selected article/dissertation to your instructors for approval in advance before embarking on the analysis.

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<th>Assessment</th>
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<td>A data analysis report (1800-2300 words) (exclusive of references and appendixes) in which you undertake and write up a detailed analysis of some qualitative research data (e.g., classroom data, interview data) using the research concepts and methods introduced in the course. You need to make a connection between your data analysis and your research question, showing how your data analysis can yield knowledge that addresses your research question. If you do not have your own data yet, you can conduct a critical analysis of a published article or a dissertation examining the data analysis and logic of inquiry in the study. Please forward your selected article/dissertation to your instructors for approval in advance before embarking on the analysis.</td>
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*(Version: July 26, 2020)*
THE UNIVERSITY OF HONG KONG
FACULTY OF EDUCATION

EDUR6020 Quantitative Research Methods I
(Semester 1 or 2, 2020-21)

Teacher(s):
Dr Gaowei Chen

Overview:
The course is designed for research postgraduate students who need an introduction to quantitative methods in education. It will start with an introduction to the common issues in quantitative research in education, which include the background to the use of quantitative methods, the major types of quantitative research design; the key steps in designing a quantitative study, as well as the reliability and validity issues. It will then move to the topics of descriptive statistics and inferential statistics (e.g., T-test, ANOVA, correlation, and regression). By examining these topics in the context of a variety of published research studies, students will develop the knowledge and skills needed to critically understand quantitative research in their field of interest. Students will also develop skills in performing data analysis using standard statistical packages (e.g., SPSS) and in properly interpreting the statistical analysis results.

Pre-requisite:
There are no pre-requisites for this course.

Course structure:
The module consists of 5 sessions of 3-hour duration each. In each session, there will be a lecture followed by in-class activities and/or discussion.

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<tr>
<th>Session</th>
<th>Topics</th>
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<tbody>
<tr>
<td>1.</td>
<td>Introduction to quantitative research design in education</td>
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<td>2.</td>
<td>Fundamentals of quantitative research in education</td>
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<td>3.</td>
<td>Inferential statistics in educational research: T-test and ANOVA</td>
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<td>4.</td>
<td>Inferential statistics in educational research: Correlation and regression</td>
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<td>5.</td>
<td>Moderation and mediation analysis</td>
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</table>

Key references:


Outcomes:

1. Becoming knowledgeable about the concepts of commonly used quantitative approaches in educational research
2. Developing the ability to critically evaluate published quantitative research studies in one’s field
3. Developing skills in conducting statistical data analysis and interpreting analysis results

Assessment:
The course will be assessed on a pass/fail basis. There are two components of assessment for this course.

1. Class participation (20%)
   - Reading, posing questions, group discussion, and sharing

2. Assignment I (20%)
   - Choosing at least two published quantitative research articles, preferably in your own field
   - Explanation of relevance and importance of the chosen articles (maximum 500 words)
   - Due date: TBC

3. Final assignment (60%)
   - Annotation of the chosen articles
   - Word limit: 3,500 - 4,000 words
   - Due date: TBC

Notes on the final assignment
For the Annotation, each student will choose at least two empirical, published journal articles using quantitative methods covered in the course syllabus. In addition to stating the research problem, the significance of the problem, and the need for the study, this annotation should include a schematic representation of the study design, written and graphic presentations of the findings, including a description of the analyses used and tables that summarize the results of the findings, and discussion of critical issues you think should be addressed.

Guiding questions for writing the annotation
Are the research questions clearly specified?
Does the critique explain …
   - Why these questions are important?
   - Why their answers are consequential?
   - How this study differs from previous studies?
Does the diagram of the study design show all the relevant parts and their relationships?
Are there flaws in the study design?
   - If yes, what are they?
   - How would you correct these flaws?
Are there flaws in the analyses?
   - If yes, what are they?
   - How would you correct these flaws?
Are the interpretations/discussions of the results inappropriate?
   - If yes, why are they inappropriate?
   - What would you have written instead?
**General Scoring Criteria for Assignments:**

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<td>Question /Task very clearly understood</td>
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<td>Full coverage of topic</td>
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<td>All basic and higher order goals met</td>
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<td>Very high level of skills</td>
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<td>Question /Task misunderstood</td>
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<td>Key aspects of topic neglected</td>
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<td>Concepts very clearly understood</td>
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<td>Argument always logical</td>
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<td>Highly logical structure &amp; development</td>
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<td>Concepts not understood</td>
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<td>Illogical argument</td>
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<td>Assignment rambles &amp; lacks structure</td>
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<td>Expresses meaning very clearly</td>
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<td>Meaning often unclear</td>
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<td>Very high standard of presentation</td>
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Comments:

*(Version: July 12, 2020)*
Overview:
Building on the foundation of Quantitative Research Methods I (or its equivalent), this course will provide access to more advanced quantitative research methods. The goal is to prepare students to become effective readers, designers, and interpreters of complex quantitative research. The course will start with a review of fundamental concepts in inferential statistics, followed by a variety of statistical methods (e.g., multiple regression, multivariate outcome analysis, factor analysis, and structural equation modeling), and will end with an introduction to other selected topics (e.g., meta-analysis and multi-level analysis). By exploring these topics in the context of a variety of published research studies, students will develop the knowledge and skills needed to critique quantitative research in their field of interest and to make critical choices in their use of statistics for their research. Students will also learn the procedures of performing data analysis using standard statistical packages (e.g., SPSS and AMOS) and proper interpretations of the statistical analysis results.

Pre-requisite:
- EDUR6020 Quantitative Research Methods I or equivalent

Course structure:
The module consists of 6 sessions of 3-hour duration each. In each session, there will be a lecture followed by in-class activities and/or discussion.

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<tr>
<th>Session</th>
<th>Topics</th>
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<tr>
<td>1.</td>
<td>Fundamental concepts in inferential statistics</td>
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<td>2.</td>
<td>Multiple regression (linear and logistic)</td>
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<td>3.</td>
<td>Multivariate outcome analysis</td>
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<td>4.</td>
<td>Factor analysis and Structural Equation Modeling (part I)</td>
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<td>5.</td>
<td>Factor analysis and Structural Equation Modeling (part II)</td>
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<td>6.</td>
<td>Meta-analysis and multi-level analysis</td>
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Key references:


Learning Outcomes:

1. Becoming knowledgeable about the strengths and weaknesses of a variety of quantitative techniques in educational research
2. Developing a critical perspective for understanding and evaluating published quantitative research studies in one’s field
3. Developing skills in conducting statistical data analysis and in interpreting analysis results

Assessment:
The course will be assessed on a pass/fail basis. There are two components of assessment for this course.

1. Class participation (20%)
   - Reading, posing questions, group discussion, and sharing

2. Assignment I (20%)
   - Choosing at least two published quantitative research articles, preferably in your own field
   - Explanation of relevance and importance of the chosen articles (maximum 500 words)
   - Due date: TBC

3. Final assignment (60%)
   - Annotation of the chosen articles
   - Word limit: 3,500 - 4,000 words
   - Due date: TBC

Notes on the final assignment
For the Annotation, each student will choose at least two empirical, published journal articles using quantitative methods covered in the course syllabus. In addition to stating the research problem, the significance of the problem, and the need for the study, this annotation should include a schematic representation of the study design, written and graphic presentations of the findings, including a description of the analyses used and tables that summarize the results of the findings, and discussion of critical issues you think should be addressed.

Guiding questions for writing the annotation
Are the research questions clearly specified?
Does the critique explain …
   - Why these questions are important?
   - Why their answers are consequential?
   - How this study differs from previous studies?
Does the diagram of the study design show all the relevant parts and their relationships?
Are there flaws in the study design?
   - If yes, what are they?
   - How would you correct these flaws?
Are there flaws in the analyses?
   - If yes, what are they?
   - How would you correct these flaws?
Are the interpretations/discussions of the results inappropriate?
   - If yes, why are they inappropriate?
   - What would you have written instead?
### General Scoring Criteria for Assignments:

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<th>CONTENT</th>
<th>Excellent, outstanding</th>
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<td>Key aspects of topic neglected</td>
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<td>Full coverage of topic</td>
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<td>Argument always logical</td>
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<td>Illogical argument</td>
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<td>Assignment rambles &amp; lacks structure</td>
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<td>Unacceptable grammar &amp; vocabulary use</td>
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<td>Fluent, accurate grammar and vocabulary</td>
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**Comments:**

### Questions to Guide the General Comprehension of Quantitative Research Publications:

**1. Purpose of the Research Study** (The Research Problem)
- What is the purpose(s) of this research report (i.e., what is the research problem)?
- How does the research problem fit within the context of previous research?
- What is the significance of this study? Does the author state the significance of the problem?
- What is the basis for this significance? Does the author state this basis?
- What is the need for this particular piece of research? Is that need stated by the author?
- What are the specifically stated questions or hypotheses this research seeks to answer or test?
- What logical deductions or inductions were used to generate the research hypotheses or questions?
- What assumptions did the researcher make, especially about the nature of reality?

**2. Design and Methodology**
- What variables are studied, controlled, or manipulated?
- How has the research been designed so as to study, control, or manipulate variables?
- What is the source of the data/information to be collected (e.g., participants, records, literature)?
- What are the specific data, or the specific information, that were collected?
- What methods and materials are used to collect and measure the data or information?

**3. Results**
- What data-analysis techniques are applied to the data/information?
- What are the general assumptions of the data-analysis techniques used, and have they been met?
- What was found?
- What limitations or qualifications need to be placed on these findings?
4. Discussion/Conclusions

• What are the stated conclusions or interpretations?
• How did the researcher deduce these conclusions?
• What limitations or qualifications does the researcher place upon them?
• How does the researcher relate the conclusions to the original questions or hypotheses?
• How does the researcher relate the conclusions to previous research?
• What criticisms or alternate interpretations of the conclusions does the researcher provide?
• What further research does the author indicate is needed?
• What advice or guides does the researcher give for that future research?

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