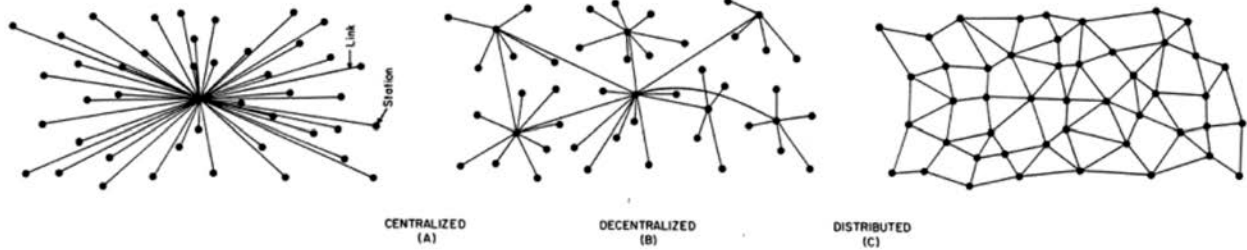


# Research Methodology in Education



EDUC 500.951

University of British Columbia

Summer 2a 2014

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**Graduate Assistant:**

**Office Hours:** By appointment

## Course Description and Valued Ends:

This course provides an introduction to educational research methods, methodologies and philosophies. Specifically, the course: (1) Familiarizes students with a cross-section of methods available to educational researchers (e.g., actor-network theory, arts-based, discourse & historical analyses, experiments, field studies, indigenous, phenomenology, surveys); (2) Explores resources a cross-section of media & technologies available to students for the conduct of research 2.0, including data collection, coding and analysis (e.g., databases & cybraries, data recording devices, OCR, translation, transcription and visualization apps, questionnaires, researchware, survey servers); (3) Familiarizes students with various rhetorical techniques for reading and writing research and analyzing paradigmatic orientations to inquiry. (4) Addresses challenges and regulation of research ethics and law.

## Valued Ends of the Course:

Our intention is to help you conceptualize, interpret, understand and do educational research. A major effort will be in helping you balance methodological practice with ethical, legal, and theoretical aspects. A second intention is to encourage you to formulate a research design and proposal, or continue progress through more advanced stages.

## Course Texts:

Palys, T. & Atchison, C. (2014). *Research decisions: Quantitative, qualitative and mixed-method approaches* (5<sup>th</sup> ed.). Toronto, ON: Nelson.

## Recommended:

Gravetter, F. J. & Wallnau, L. B. (2014). *Essentials of statistics for the behavioral sciences* (8<sup>th</sup> ed.). Scarborough, ON: Wadsworth, Cengage Learning.

## Assessment (see details below):

1. Participation (20%)
2. Research Topic **or** Introduction to Literature Review (30%)
3. Final Research Proposal **or** Literature Review (50%)

## Deadline:

Ongoing  
10 July  
18 July

## **Operational Definition of Letter Grade Categories** (EDCP, Revised, 2008)

### **A level - Good to Excellent Work**

A+ (90-100%) A very high level of quality throughout every aspect of the work. It shows the individual (or group) has gone well beyond what has been provided and has extended the usual ways of thinking and/or performing. Outstanding comprehension of subject matter and use of existing literature and research. Consistently integrates critical and creative perspectives in relation to the subject material. The work shows a very high degree of engagement with the topic.

A (85-89%) Generally a high quality throughout the work. No problems of any significance, and evidence of attention given to each and every detail. Very good comprehension of subject and use of existing literature and research. For the most part, integrates critical and creative perspectives in relation to the subject material. Shows a high degree of engagement with the topic.

A- (80-84%) Generally a good quality throughout the work. A few problems of minor significance. Good comprehension of subject matter and use of existing literature and research. Work demonstrates an ability to integrate critical and creative perspectives on most occasions. The work demonstrates a reasonable degree of engagement with the topic.

### **B level - Adequate Work**

B+ (76-79%) Some aspects of good quality to the work. Some problems of minor significance. There are examples of integrating critical and creative perspectives in relation to the subject material. A degree of engagement with the topic.

B (72-75%) Adequate quality. A number of problems of some significance. Difficulty evident in the comprehension of the subject material and use of existing literature and research. Only a few examples of integrating critical and creative perspectives in relation to the subject material. Some engagement with the topic.

B- (68-71%) Barely adequate work at the graduate level.

**NOTE: For UBC's Faculty of Graduate Studies (FOGS), a final mark below 68% for Doctoral students and below 60% for Masters students is the equivalent of a Failing mark.**

### **C & D level - Seriously Flawed Work**

C (55-67%) Serious flaws in understanding of the subject *material*. Minimal integration of critical and creative perspectives in relation to the subject material. Inadequate engagement with the topic. Inadequate work at the graduate level.

#### **D level**

D (50-54%)

### **F level - Failing Work**

F (0-49%)

- ❑ **Academic Honesty and Standards, and Academic Freedom:** *UBC Calendar 2013/14*
- ❑ **Policies and Regulations (Selected):** <http://www.students.ubc.ca/calendar>
- ❑ **Academic Accommodation for Students with Disabilities:** Students with a disability who wish to have an academic accommodation should contact the Disability Resource Centre without delay (see UBC Policy #73 [www.universitycounsel.ubc.ca/policies/policy73.pdf](http://www.universitycounsel.ubc.ca/policies/policy73.pdf)).

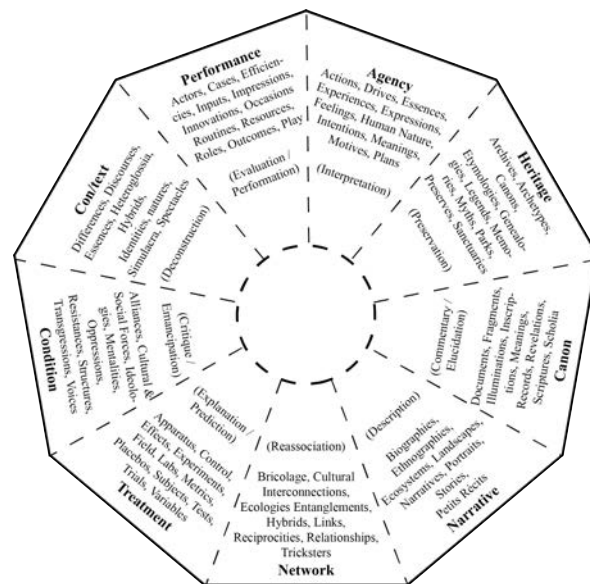
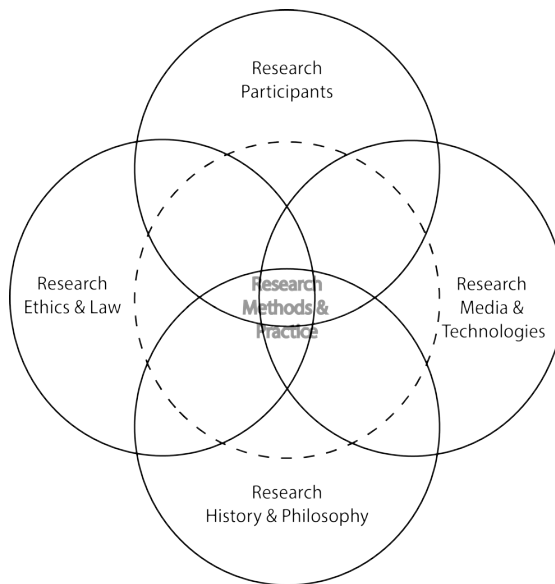
## Course Schedule

Date	Online / F2F	Activity	Assignment	Topics (see Readings next section)
Day 1 2 July	F2F	#1 - #3	Course Intro	<b>Course introduction / Research 2.0 Etymology, History and Philosophy of Research</b>
Day 2 3 July	F2F	#4 - #6	Readings & Assignments	<b>Research Ethics &amp; Law Research Participants (Human &amp; Non-Human Subjects)</b>
Day 3 4 July	F2F	#7 - #10	Readings & Assignments	<b>Research Problems &amp; Research Policy: Funding, Research Topics, Designs &amp; Proposals Writing, Theoretical Frameworks Literature Reviews</b>
<b>Week 2</b>				
Day 4 7 July	F2F	#11 - #14	Readings & Assignments	<b>Research 2.0: Research Media and Technologies</b>
Day 5 8 July	F2F	#15 - #16	<b>First Assignment Due: 8 July</b>	<b>Research Media and Technologies Research Methods and Methodologies</b>
Day 6 9 July	F2F	#17	Readings & Assignments	<b>Research Media and Technologies Research Methods and Methodologies Data Collection, Coding, Analysis &amp; Visualization</b>
Day 7 10 July	F2F	#18 - #19	Readings & Assignments	<b>Research Media and Technologies Research Methods and Methodologies Data Collection, Coding, Analysis &amp; Visualization</b>
Day 8 11 July	Online	#20	Readings & Assignments	<b>Research Media and Technologies Research Methods and Methodologies Data Collection, Coding, Analysis &amp; Visualization</b>
<b>Week 3</b>				
Day 9 14 July	F2F	#21 - #22	Readings & Assignments	<b>Research Media and Technologies Research Methods and Methodologies Data Collection, Coding, Analysis &amp; Visualization</b>
Day 10 15 July	F2F	#23	Readings & Assignments	<b>Research Media and Technologies Research Methods and Methodologies Data Collection, Coding, Analysis &amp; Visualization</b>
Day 11 16 July	F2F	#24	Readings & Assignments	<b>Research Methods and Methodologies Data Collection, Coding, Analysis &amp; Visualization</b>
Day 12 17 July	F2F	#25	Readings & Assignments	<b>Research Methods and Methodologies Data Collection, Coding, Analysis &amp; Visualization Research Communication</b>
Day 13 18 July	F2F	#26	<b>Final Assignment Due: 18 July</b>	<b>Research Communication</b>

# Course Major Topics & Readings

## Research Decisions (Palys & Atchison, 2014) Schedule:

Date	Day	Chapter
2 July	Day 1	Chapter 1: Perspectives on Research
3 July	Day 2	Chapter 2: Getting Started + Chapter 3: Ethics in Social Research
4 July	Day 3	Chapter 4: Sampling and Recruitment + Chapter 5: Constructing a Research Proposal
7 July	Day 4	Chapters 1-5, cont'd
8 July	Day 5	Chapter 14: Mixed Methods
9 July	Day 6	Chapter 6: Interactive Methods: Survey, Interview, and Oral History Techniques
10 July	Day 7	Chapter 7: Observation and Ethnography
11 July	Day 8	Chapter 8: Archival Methods
14 July	Day 9	Chapter 9: Eliminating Rival Plausible Explanations: The Experiment
15 July	Day 10	Chapter 10: From Manipulative to Analytic Control: Quasi-Experimentation and Case Study Analysis
16 July	Day 11	Chapter 11: Text, Image, Audio, and Video: Making Sense of Non-Numeric Data
17 July	Day 12	Chapter 12: A Conceptual Introduction to Quantitative Data Analysis
18 July	Day 13	Chapter 13: Writing Your Research Report



### Etymology, History and Philosophy of Research

- Topic 1:** Research Semantics and Rhetoric
- Topic 2:** Histories of Research
- Topic 3:** Philosophies of Research and Epistemology

### Research Ethics & Law

- Topic 4:** Research Ethics & Law
- Reading:** Lowman, J. & Palys, T. (2003). Subject to the law: Civil disobedience, research ethics, and the law of privilege. *Sociological Methodology*, 33, 381-389.

### Research Participants (Human & Non-Human Subjects)

- Topic 5:** Participation, Sampling and Recruitment

### Research Problems & Research Policy: Funding, Research Topics, Designs & Proposals

- Topic 6:** Searching and Filtering

**Topic 7:** Dimensioning Phenomena: Tracking, Mapping, & Framing

**July 3 Reading:** Mason, C. (2011). Facet methodology: The case for an inventive research orientation. *Methodological Innovations Online*, 6(3), 75-92. Retrieved <http://www.methodologicalinnovations.org.uk/wp-content/uploads/2013/11/MIO63Paper31.pdf>

**Topic 8:** Research Problems & Funding, Audiences, Topics & Proposals

**July 4 Reading:** University of Sydney. (2001). Writing a research proposal. Sydney: Learning Centre. Retrieved <http://sydney.edu.au/stuserv/documents/thesisproposal.pdf>

### **Writing & Style, Theory & Theoretical Frameworks, Literature Reviews**

**Topic 9:** Writing, Style, Literature Reviews & Theoretical Frameworks

### **Research 2.0: Research Media and Technologies**

**Topic 10:** Research Applications and Devices

**July 7 Reading:** Basit, T. N. (2003). [Manual or electronic? The role of coding in qualitative data analysis](#). *Educational Research*, 45(2). 145-154.

**Topic 11:** Research Networks and Newstories

**Topic 12:** Big Data/bases, Analytics and Semantic Web

### **Research Methods, Methodologies & Psychometrics**

**Topic 13:** Qualitative Methods

**July 9 Reading:** Wolf, M. (1992). Writing ethnography: The poetics and politics of culture. In *A thrice-told tale: Feminism, postmodernism, and ethnographic responsibility* (pp. 127-139). Stanford, CA: Stanford University Press.

**July 10 Reading:** Lather, P. (1993). Fertile obsession: Validity after postmodernism. *Sociological Quarterly*, 34(4), 673-693.

**Topic 14:** Quantitative Methods

**July 14 Reading:** Gravetter, F. J. & Wallnau, L. B. (2013). Introduction to statistics. In [Essentials of statistics for the behavioral sciences](#) (8<sup>th</sup> ed.) (pp. 4-36). Scarborough, ON: Wadsworth, Cengage Learning.

**July 15 Reading:** Gravetter, F. J. & Wallnau, L. B. (2013). Frequency distributions. In [Essentials of statistics for the behavioral sciences](#) (8<sup>th</sup> ed.) (pp. 37-58). Scarborough, ON: Wadsworth, Cengage Learning.

**Topic 15:** Mixed Methods

### **Data Collection, Coding, Analysis & Visualization**

**Topic 16:** Instrumentation and Protocols

**Topic 17:** Data Collection

**Topic 18:** Data Coding and Analysis

### **Research Engagement, Knowledge Mobilization & Research Metrics & Impact**

**Topic 19:** Research Communication, Writing and Reporting

**Topic 20:** Research Presenting and Research Rhetoric

## Course Assignments

### Participation:

Participation is valued at 20% of your final grade. We refer to the scholarly level of participation as **academic conversation**, which entails a variety of things including academic conversation, articulation and presentation. Participation is interdependent with preparation. **Read for Meaning along with Purpose...**

Participation		
Low	Avg	High
Appropriately and accurately articulates key constructs and themes in readings, etc.		
1	3	5
Reveals an attempt to synthesize knowledge of research methodologies (readings, etc.).		
1	5.5	10
Advances collective knowledge and consciousness by engaging with authors, peers, and instructors		
1	3	5
<b>Total: xx / 20</b>		

### Assignments:

#### 1. Research Topic, Purpose and Problem (30%)

Write a clear research topic statement for your research proposal, including the context, purpose, problem, rationale, and relevance. \*This is the first section of the second assignment (See *Thesis and Dissertation Proposal Guide*; See outlines). (2 pages, double-spaced)

OR

#### Introduction to Literature Review (30%)

Write a clear introduction for your literature review, including an overview, context and scope of the review, and categories for selecting sources. \*This is the first section of the second assignment (see outline). (2 pages, double-spaced)

#### 2. Research Proposal (50%)

Develop your ideas about a specific research issue or problem, elaborating on the rationale of the first assignment. State the research problem, set it in a theoretical context or framework (i.e., “why is this important to study?”) and discuss how you might go about investigating the research problem by elaborating a methodology within a larger research design (See outlines).

OR

#### Literature Review (50%)

Drawing on carefully selected, relevant articles, books, etc. (sources) write a critical review essay to explore the topic, or support either the theoretical framework or the methodological approach to investigating your research problem. Keep in mind that this is a critical literature review essay, not a descriptive report of sources. Construct the literature review with a beginning (introduction), middle (primary argument and evidence), and end (conclusion). The beginning sets the necessary context, categories and limits, tone, and overall argument or thesis (See outlines).

### Qualitative Research Design Proposal Format

<b>Due</b>	<b>Section</b>	<b>Pages</b>
8 July	Title	
18 July	TOC / Outline of Thesis (Anticipated Chapters & Major Sections)	<b>(1 page)</b>
8 July	Introduction (Brief History of the Problem, Rationale, Theoretical Framings, Positionality— Relation of Self to Problem)	<b>(1/2 page)</b>
8 July	Purpose (General Focus) (Why?)	<b>(1/2 – 1 page)</b>
8 July	Problem or Focus of Inquiry (What?) Clear Statement—Research Question(s) or Problem(s)	<b>(1/2 page or less)</b>
18 July	Review of Literature History of the Problem; Context, Theories	<b>(6-10 pages)</b>
18 July	Method(s) (How?, When?, Where And Who?) Appropriateness of and Issues around methods chosen Sample (Participants) or Unit(s) of Analysis Data Collection (Protocols or Instrumentation) Sites (Sources) Participant Ethics	<b>(6-8 pages)</b>
18 July	Data Analysis (How?) Analysis and Coding	<b>(2-5 pages)</b>
18 July	Report of Outcomes Knowledge Mobilization Plan Recipients of Outcomes Permissions to Share Intellectual Property and Publish Significance of research; Future research	<b>(1 page or less)</b>
18 July	References	<b>Attach</b>
18 July	Appendices (e.g. Timeline, consent forms, glossary)	<b>Attach</b>

### Quantitative Research Design Proposal Format

<b>Due</b>	<b>Section</b>	<b>Pages</b>
8 July	Title	
18 July	TOC / Outline of Thesis (Anticipated Chapters & Major Sections)	<b>(1 page)</b>
8 July	Introduction (Brief History of the Problem, Rationale, Theoretical Framings, Positionality— Relation of Self to Problem)	<b>(1/2 page)</b>
8 July	Purpose (General Focus) (Why?)	<b>(1/2 – 1 page)</b>
8 July	Problem or Focus of Inquiry (What?) Clear Statement— Research Question(s), Hypotheses or Problem(s), Limitations	<b>(1/2 page or less)</b>
18 July	Review of Literature History of the Problem, Preliminary Studies, Pilot studies, Theories	<b>(6-10 pages)</b>
18 July	Method(s) (How?, When?, Where And Who?) Appropriateness of and Issues around methods chosen Sample (Participants) or Unit(s) of Analysis (Variables) Data Collection (Instrumentation) Sites (Sources) Participant Ethics	<b>(6-8 pages)</b>
18 July	Data Analysis (How?) Variables, Statistical Techniques	<b>(2-5 pages)</b>
18 July	Knowledge Mobilization Plan Recipients of Outcomes Permissions to Share Intellectual Property and Publish Significance of research; Future research	<b>(1 page or less)</b>
18 July	References	<b>Attach</b>
18 July	Appendices (e.g. Timeline, consent forms, Terminology)	<b>Attach</b>

### Literature Review Format

Due	Section	Pages
8 July	Title	
8 July	1. Overview / Introduction of subject, theories and issues involved <ul style="list-style-type: none"> <li>• Type of literature review (theory, methodology, policy, quantitative research, qualitative research, etc.)</li> <li>• Scope: what type of resources are best?</li> <li>• Search for information: wide enough and narrow enough</li> </ul>	<b>(1 page)</b>
8 July	2. Categories selected as natural divides of thesis and reviewed sources <ul style="list-style-type: none"> <li>• Sources organized around the research question or thesis</li> <li>• Areas of controversy or debate included</li> </ul>	<b>(1 page)</b>
18 July	3. Analysis and interpretation of overarching similarities and variances of ideas: Include <ul style="list-style-type: none"> <li>• Provenance: credentials, evidence</li> <li>• Objectivity: authors' point of view and representation of other views</li> <li>• Persuasiveness: which theses are most convincing v least?</li> <li>• Value: Does this work contribute in a significant way to understanding the subject?</li> </ul>	<b>(6-8 pages)</b>
18 July	4. Summation or conclusions of thesis generating idea in context with materials reviewed <ul style="list-style-type: none"> <li>• What is known and not known</li> <li>• Areas of further research</li> <li>• Relevant, appropriate and, useful</li> </ul>	<b>(2-5 pages)</b>
18 July	References	<b>Attach</b>
18 July	Appendices (e.g. Glossary, Comparative Tables)	<b>Attach</b>

### Research Proposal & Literature Review

<b>Quality of Introduction:</b> Discussion of issues, general reason for selection of topic, how the introduction prepares the reader for what is to follow, etc.	10
<b>Quality of Substance:</b> Relevance of writing in discussion of research issues as they relate to the topic. General quality of outline in terms of logical, informative discussion & development.	10
<b>Quality of Writing, Style, Communication of Concepts:</b> Grammatical, spelling, punctuation errors; overall organization and readability; developed logically, organized well; APA format followed; clean, readable, layout.	10
<b>Critical Analysis:</b> Discussions of various issues that relate to the topic; discussion/analyses and synthesis of pros and cons of the sources used.	10
<b>Synthesis of Literature Review:</b> Discussion of how the literature review sources relate to thesis topic (in broad, general terms, in terms of purpose/problems, etc.).	10
<b>Total</b>	<b>50</b>