Course Syllabus

INTRODUCTION TO RESEARCH METHODS

Written by: William D. Bjoraker, PhD

Credits: 2 units

COURSE DESCRIPTION

This course provides familiarization with standard research methods used in graduate level research. The student gains necessary information about the research methods available so as to guide the student to make the correct choice of methods suitable for achieving the specific research goals the student has chosen. There are two basic types of research (or two research paradigms)— qualitative and quantitative. Each of these types will be assessed, with introductions to some of the most widely used methods for each of the types.

INTRODUCTION TO RESEARCH METHODS exposes the student to what methods are available so as to help the student design his or her research. An outcome of this course will be readiness to select two or more research methods for the dissertation research stage. The subsequent course, WCIU RESEARCH DESIGN, will lead to the design of the Doctoral Learning Contract and the first draft of the dissertation proposal. The two courses are complementary.

BRIEF INTRODUCTORY BACKGROUND TO RESEARCH METHODS

Here are working definitions of the two types of research:

Quantitative Research—a formal, objective, systematic process in which numerical data are used to obtain information about the world. Statistical analysis is a major feature of quantitative research. Often involves an experimental research design in which experiments are used to test a theory or hypothesis. Analysis of data is generally drawn deductively from quantifiable data.

Qualitative Research – a process of gaining understanding of the rich complexity of historical, social, cultural, anthropological and religious phenomena. Any kind of research not arrived at by means of statistical procedures or other means of quantification. Research methods are used that gather data inductively, and provide means (grids, models, theories) of analyzing and interpreting the data.
Here is a simple example contrasting the two methods— Consider a study undertaken into the waiting times in an emergency room of a hospital in Iraq. A quantitative study would measure how long the people wait before being treated (perhaps measuring the longest and shortest wait, and then the average wait). This would be purely objective and is quantifiable in terms of time. However, if the researcher wanted to discover how patients felt about their waiting time, the researcher would ask questions that obtain more subjective answers. For example— “How do you feel about having to wait six hours to be seen by a doctor?” or “How has the threat of being bombed in the street by antigovernment insurgents make you feel about waiting?” Methods are needed to craft the right kinds of questions and to systematically analyze such subjective data. This latter type is qualitative research.

The key questions for any researcher are— What do I need to know? How will I come to know it? Methods of research used will be determined directly by (or follow logically from) the student’s problem statement or the central research issue (CRI) of the research project. The methods should be appropriate to collecting and analyzing data needed to answer the stated research questions (the student forms 3 to 6 specific research questions; the above key questions are general for all research). The methods the researcher selects will describe:

- How data are to be collected.
- How data are to be analyzed.
- Anticipated threats to validity and reliability of the data and limitations to the research as proposed should be assessed for the research methods chosen in regard to the challenges of the specific research project chosen.

COURSE OBJECTIVES

Learning Outcomes: Upon completion of this course, students will be able to:
1. Explain the essential character and uses of the two types or paradigms of research.
2. Compare and contrast the two types of research.
3. Describe the general nature and use of five qualitative methods, and three quantitative methods.
4. Select two methods applicable to the central research issue of their project, and be able to comprehend the theory and practical procedures of the chosen methods well enough to be able and ready to implement them in the actual research designed by the student.
REQUIRED TEXTS


This book is necessary training for anyone doing graduate research, because there is far too much material for the modern graduate student to read to be able to read every book in depth, from cover to cover. Some books are to be merely tasted, some to be nibbled upon and chewed. Some are to be chewed very thoroughly and fully digested. This book by Clinton describes and offers instruction in skills needed to read books at different levels of depth or thoroughness, on a continuum of six levels— from the least or most shallow reading, to the deepest, most thorough reading. For the best, most effective results, acquire the Clinton book, *Reading on the Run*. But if you are unable to acquire the book, what follows is a summary of the six levels:

1) **Scan**—Read the Preface, the Forward, the Dust jacket (cover), the Table of Contents, the Index, Bibliography, and any charts, graphs, etc., and then thumb through the book, read the Conclusion of the book. Based on only the knowledge you have gained from this “scan,” answer six questions: Who wrote it? 2) What is the author’s perspective? 3) How is it organized? 4) What is author’s purpose? 5) Is it worth reading at the next levels: ransack or browse level? Decide. 6) If so, then after ransacking or browsing, is it worth reading thoroughly? Decide.

2) **Ransack**—A “closed ransack” is when you scan and brose the book looking for a specific topic you have in mind. Look for what it says in just that theme, and note where it discusses that theme. An “open ransack” is when you scan and browse the book with no specific topic in mind, but you look for new ideas or a new slant in on that topic. Look for four results: 1) Is there a new idea on a specific pre-chosen topic? Take note. 2) Decide if the book adds nothing new to a specific topic. 3) Take note of new ideas that stood out to you, that you gained. 4) Decide the book warrants a deeper reading. This should be based on its relevance to your research.

3) **Browse**—This is detailed reading of portions of the book, not the whole book. Choose any and a few contextual units, like paragraphs, chapter sections, whole chapters or parts. Answer these evaluative five questions on the portions read: 1) What is said? 2) How is it said? 3) How is it useful to me? 4) How does it compare with what I have already read or know on this topic? 5) Does the book develop an important topic in an organized manner? Is it directly relevant to my research? If so, it warrants a thorough reading.

4) **Pre-Read**—If you decided a book warrants a thorough reading, then you must first “Pre-read” the book. Here is how—Make a one-page preliminary report by answering five points: 1) Who is the author and what is his background and perspective? 2) What is the author’s intent and methodology in this book? 3) Make at least a tentative statement as to what you think is the thesis of the book (the assertion or claim the author is arguing for, or the main topic the author is explicating). 4) Write out the intention of each Part (I, II, III, etc.) and/or each chapter of the book, and 5) How each section contributes to the overall argument of the book. How does each section build the case argued in the book; how does it fit in the overall argument? Glean enough from reading the book at the Scan, Browse, and Ransack levels to be able to formulate these five statement about the book without thoroughly reading the book.
5) **Thorough Reading** – A detailed reading of all parts of the texts in order to conceptualize the content of the material. Also to be able to affirm agreement, disagree, and thus to critically modify the content based on your own knowledge. As a result you will produce **six** evaluative statements: **Critical evaluation questions:** 1) Show if and where the author is uninformed, where the book lacks information. 2) Show if and how the author is misinformed. 3) Show if and where the author is illogical. 4) Show if and how the author is incomplete in his or her purpose. **Useful evaluation questions:** 5) State the strengths of the book. 6) State the relevance of the book for today's needs, and for your own research topic.

6) **Study** - After a **Thorough Reading** treatment of a book, this deepest level goes into further background research, beyond the book itself. Very few books should be read at this level; actually basal (seminal), or essentially books in your field of research or work, books that will be a standard for comparison with others. To treat a book at **Study level**, do this **five** steps: 1) Write the Thorough Reading report of level five. 2) Read and assess two or three other writer's reviews of the book. 3) Research the original sources the author draws upon. 4) Compare this book with other books in the same specialized field. Assess how and why this book may be superior or more comprehensive than others (if you judge it to be). 5) Write your own original analytical review of the book, apprizing its value.

**Qualitative Research**


O'Brien, John, Dan Remenyi, and Aideen Keaney. *Historiography: A Neglected Research Method in Business and Management Studies*. School of Systems and Data Studies, Trinity College Dublin, Ireland. This article on historical research methods relevant to researching the history of organizations is available as free download here: [http://www.ejbrm.com/volume2/issue2/p161](http://www.ejbrm.com/volume2/issue2/p161)
Recommended Reading for Qualitative Research


Quantitative Research


To give the student a sample of what is available about the books on the SAGE web site, the following is copied from the SAGE web site about this book by Reinard:

“Written in an accessible style using straightforward and direct language, *Communication Research Statistics* guides students through the statistics actually used in most empirical research undertaken in communication studies. This introductory textbook is the only work in communication that includes details on statistical analysis of data with a full set of data analysis instructions based on “Statistical Package for the Social Sciences” (SPSS 12) and Excel XP.”
Key Features:

*Emphasizes basic and introductory statistical thinking:* The basic needs of novice researchers and students are addressed, while underscoring the foundational elements of statistical analyses in research. Students learn how statistics are used to provide evidence for research arguments and how to evaluate such evidence for themselves.

*Prepares students to use statistics:* Students are encouraged to use statistics as they encounter and evaluate quantitative research. The book details how statistics can be understood by developing actual skills to carry out rudimentary work. Examples are drawn from mass communication, speech communication, and communication disorders.

**Companion Web Site** - A dedicated Web site for *Communication Research Statistics* at [http://commfaculty.fullerton.edu/jreinard/constats.htm](http://commfaculty.fullerton.edu/jreinard/constats.htm) includes a glossary, data sets, chapter summaries, additional readings, links to other useful sites, selected “calculators” for computation of related statistics, additional macros for selected statistics using Excel and SPSS, and extra chapters on multiple discriminant analysis and loglinear analysis.


To give the student a sample of what is available about the books on the SAGE web site, the following is copied from the SAGE web site about this book:

“Author Neil J. Salkind takes students through various statistical procedures, beginning with correlation and graphical representation of data and ending with inferential techniques and analysis of variance. In addition, the text covers SPSS (Statistical Package for the Social Sciences), and includes reviews of more advanced techniques, such as reliability, validity, introductory non-parametric statistics, and more. Pedagogical features include sidebars offering additional technical information about the topics presented and points that reinforce major themes in the book. Finally, this new edition includes more examples than ever before, an expanded set of exercises at the end of each chapter, and a more comprehensive glossary.”


Students who know their research will largely involve quantitative methods are advised to access and scan and browse this book. It is especially relevant for research in India. From the SAGE Publication web site about the book:

“This book explores the entire spectrum of quantitative social research methods and their application, with special reference to the development sector; presenting its fundamental postulates, tools and techniques of analysis -and assesses its relevance for the development and social sectors in India. The author explores how development changes take place and their impact on rural life, especially on the underprivileged and marginalized sections of society.
Divided into two sections, the book first discusses all aspects of social research - its various methods, scope, sampling methodology and significance, and presents quantitative, univariate, bivariate and multivariate data analysis with the help of software packages such as SPSS and STATA.

In the second section, the author examines the impact of social research on health and nutrition, poverty and rural development, education, water and sanitation, environment and natural resource management.


**Recommended Reading for Quantitative Research**


**Instructions on Reading the Texts**

- Using the Sage Publications web site, the student is required to “Scan” and “Browse” all required texts listed (for these skills, see Continuum Reading Skills above).
- If the student has established his or her central research issue, and has a good idea of what kind of method(s) you will need to use, then the student will choose two of the books most applicable to your research type and goals, and read them at the “Thorough Reading” level.
- Many of the books are accessible for browsing at Google Books, see: [http://books.google.com/] How much of a given book is browsable varies— anywhere from a few sample pages to the whole book. If the book is under copyright, and the publisher or author is not part of the Google's Partner Program, only basic information about the book is available, similar to a card catalog in a library, and, in some cases, a few snippets—sentences containing your search terms in context.
- You will notice that most of the required text for this course are books are published by SAGE Publications, Inc. SAGE is a leading international publisher of journals, books, and electronic media for academic, educational, and professional markets. Since 1965, SAGE has helped inform and educate a global community of scholars, practitioners, researchers, and
students spanning a wide range of subject areas including business, humanities, social sciences, and science, technology, medicine and the broad field of international development.
Assuming you have access to a computer and the Internet, you may browse these books at the homepage of Sage Publications, Inc. See:

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From there, click on the place where it says “Select your location.” You are then given an option of ten continents. Check the one where you are.

You will be then taken to a page with three main options: “Textbooks,” “Journals,” “References.” Click on “Textbooks.” Spend some time browsing in the books featured here. You can search for the titles of the required texts in the search box, to the right of which is “GO” button to click to run the search.

To email Sage Publications, Inc., for inquiries, address: order@sagepub.com

**COURSE REQUIREMENTS: SCHEDULE WITH ASSIGNED LEARNING ACTIVITIES**

Below is a scheduled TABLE for a suggested pacing of a students progress through this course. A student can and may complete the work more rapidly than this.

**Note:** the student should keep in mind the goal of choosing two research methods to finally focus upon while becoming familiar with the various methods available. These will be the methods actually used in the student’s research and should be mastered by the student. The student will need to discuss and decide on these in consultation with his or her Major Advisor.

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<tr>
<th>Week</th>
<th>Due Dates</th>
<th>Topics</th>
<th>Readings and Assignments Due</th>
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<tr>
<td>1 &amp; 2</td>
<td>Given in Populi</td>
<td>Familiarization with Quantitative Research:</td>
<td>Scan, Ransack and Browse the books by <strong>Kultar Singh</strong> (to become acquainted with the whole spectrum of quantitative research methods), and <strong>Salkind</strong>. If you think you may use statistical research, then read <strong>Salkind</strong> at the <strong>Thorough Reading</strong> level, producing a written paper with the six evaluative statements of the <strong>Thorough Reading</strong> level instructions, and turn in to the instructor.</td>
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<td>3&amp;4</td>
<td>Familiarization with Quantitative Research</td>
<td><em>Scan, Ransack and Browse</em> the books by <strong>Fowler, Sogaard, Knoke, and Reinard</strong>. If you think you may use survey research, then read <strong>Fowler</strong> at the <em>Thorough Reading</em> level, producing a written paper with the six evaluative statements of the <em>Thorough Reading</em> level instructions, and turn in to the instructor. If you think you may use one of the methods described by <strong>Reinard</strong> or <strong>Knoke</strong>, then do a <em>Thorough Reading</em> level report on those books.</td>
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<td>5&amp;6</td>
<td>Familiarization with Qualitative Research</td>
<td><em>Scan, Ransack and Browse</em> <strong>Charmaz, Kvale &amp; Brinkmann and Spradley</strong>. If you think you may use grounded theory, interviews or participant observation in your research, then read that book at the <em>Thorough Reading</em> level, producing a written paper with the six evaluative statements of the <em>Thorough Reading</em> level instructions, and turn in to the instructor.</td>
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<td>7&amp;8</td>
<td>Familiarization with Qualitative Research</td>
<td><em>Scan, Ransack and Browse</em> <strong>Stewart &amp; Shamdasii</strong>, and <strong>Yin</strong>. If you think you will use Focus Groups, or Case Study methods in your research, then read that book at the <em>Thorough Reading</em> level, producing a written paper with the six evaluative statements of the <em>Thorough Reading</em> level instructions, and turn in to the instructor.</td>
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<td>9 &amp; 10</td>
<td>Confirming Two Selected Methods, and Comparing and Contrasting Quantitative Qualitative Research</td>
<td>1) Make sure you have selected two methods consistent with your central research issue and your research design, that is—methods that will be useful in answering your research questions. You must turn in Thorough Reading level reports to the instructor on the books dealing with those two methods. 2) Write a paper comparing and contrasting quantitative and qualitative methods and why you need one or the other for the purposes of your research project. Discuss five qualitative methods and three quantitative methods in your paper. Paper should be from 5 to 7 pages in length.</td>
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<tr>
<td>11 &amp; 12</td>
<td>Getting Ready for Action: Implementing Your Selected Methods in Your Actual Research</td>
<td>You, as a student, will by now have become thoroughly conversant in at least two methods, having written a Thorough Reading level report on them both of your chosen methods. In preparation for your doctoral research proposal—which is the product of the WCIU RESEARCH DESIGN course—describe the specific and actual way you will implement the two methods you have selected.</td>
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