



*Directed research and*  
**Independent Study in the Environment**  
*Strategies and Techniques for Conducting Qualitative  
and Quantitative Research*

Dr. Avigail Morris

3 weekly hours (lecture+ individual consultations) 3 credits, Undergraduate

### **Course Description**

This course is designed to provide a framework for students interested in pursuing an independent research project. The course will introduce students to methods for designing, analyzing, writing and presenting both quantitative and qualitative research. It provides a unique opportunity for students to work on an individual basis with experts in their field of interest and engage in issues which are specific to the Middle East.

In the first two weeks of the course students will choose a research project either from ongoing research or an original research project of their choosing. (\*note: in light of Covid – 19 some projects may be limited to research which can be conducted within a close proximity to the Arava Institute). Each student will either seek their own academic advisor or be assigned an academic advisor in the region who will guide them throughout the semester. Simultaneously, for the first few weeks of the semester, students will be required to attend a two-hour seminar which will teach the steps involved in conducting both qualitative and quantitative research from surveying the relevant literature to presenting the final results.

The second part of the course will focus less on frontal lectures and more on practical tutorials which will help students to progress with their individual research projects. Students will be divided according to the type of research they are conducting (qualitative, quantitative or a combination of the two) and work both in groups and individually with one of the two lecturers of the course. By the end of the semester students will have learned the skills necessary for writing a research proposal, surveying relevant literature, gathering and analyzing data, presenting the results and writing a research paper.

### **Objectives of the course**

- Familiarize students in the basic steps necessary for preparing and carrying out research
- Familiarize students with various methods for conducting empirical research (quantitative and qualitative)
- Illustrate how qualitative and quantitative methods can be combined in order to enrich both the collection and evaluation of data.
- Familiarize students with important strategies and techniques used for collecting and analyzing data as well as presenting the final results.

- Provide students with the opportunity of working with professionals in their field of interest

<b>Grading criteria part I: research proposal</b>	
Attendance and Punctuality	15%
Assignment #1: Choose a topic and advisor	mandatory
Assignment #2: Review of academic article (either individually or in groups of 2-3 students)	10%
Assignment #3: Pre proposal (½ - 1 page, font size - 12) which includes: the name of the student and advisor, research topic & question, significance of study, list of literature review.	10%
Assignment #4: Final research proposal (3-5 pages) which includes: introduction, question(s), problem statement, background and literature review, detailed research methodology, contribution of study to the field, budget justification, project timeline & bibliography.	15%
<b>Grading criteria part II (power point/poster and paper)</b>	
Assignment #5: Draft of power point presentation or poster.	mandatory
Assignment #6: PowerPoint Presentation Slides (7 slides) or poster	20%
Assignment #7: Final research paper: Introduction, Problem Statement, Literature Review, Methodology, Results, Discussion, Conclusion& References (6-8 pages for quantitative research) and 7-10 pages for qualitative research)	30%
Total	100 %

## **Lesson Outline**

<b>Lesson #</b>	<b>Topics</b>
<b>1.</b>	Introduction to course: Lesson one will introduce the students to the criteria necessary for succeeding in the course. It will then discuss: <b>1.</b> What is research and why it is important, <b>2.</b> Various types of research (qualitative, quantitative or a combination of the two), <b>3.</b> How to choose a research topic <b>4.</b> How to write a pre-proposal.
	List of projects and supervisor contact information.
<b>Assignments 1 - due</b>	1. Submit a topic for your research with the approval of a supervisor. 2. Each student or set of students will choose, review and analyze an academic article according to guidelines and questions provided by the lecturers.

2.	Guidelines for writing a successful proposal
<b>Assignment 2 - due</b>	1. Article analysis based on guidelines 2. All pre-proposals (1/2 to 1 page) are due by Lesson Three
3.	Strategies and techniques for conducting quantitative research. - This lesson will introduce some important fundamental concepts of quantitative research, types of research, different types and assumptions of quantitative research, when to use and not to use quantitative methods, advantages, common approaches and samples of quantitative research.
4.	Strategies and techniques for conducting qualitative research This lesson will draw on examples from the field in order to discuss the strategies and techniques used in conducting qualitative research from a socio-anthropological perspective.
<b>Assignment 3 - due</b>	Prepare full proposal (3-5 pages)
5.	The class will be divided according to those students who are conducting quantitative research and those who are conducting qualitative research. All students will meet on a weekly basis with their respective lecturer so that the lecturers can follow up more closely on the progress of each student. Tutorials will be given each week until the end of the semester and will include practical "hands on" exercises which will help students progress with their individual research projects.  Tutorials and follow up.  Avigail Qualitative Research: methods of collecting data and writing a questionnaire
6.	Tutorials and follow up. Avigail Qualitative Research: Methods of collecting data (ethics in social research)  Jawad Quantitative Research: How to write literature review?
7.	Tutorials and follow up. Qualitative (conducting observations in social research)  Quantitative: (methodology how to quantify and how to analyze quantitative data?)
8.	Tutorials and follow up. Qualitative (how to analyze qualitative data?)  Jawad Quantitative Research; (Data interpretation: results, discussions and conclusions) How to Write an Academic Research Paper? What is a review paper?

9.	Tutorial and follow up:  Avigail Qualitative Research: (finalizing presentations and papers)  Jawad Quantitative Research; Oral presentation practice)
<b>Assignment 4 - due</b>	Draft PowerPoint Presentation
10.	Qualitative methodology: case study
11.	Quantitative methodology: case study
12.	Presentation of completed research projects (6 – 7 slides each)
<b>Full paper due</b>	<b>Full paper due</b>

**Recommended Readings:**

J. Bacon-Shone (2015) Introduction to Quantitative Research Methods (first edition), University of Hong Kong Publishers

Creswell, John W. (2018) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, SAGE publication Inc. Thousand Oaks, USA

H. Russell Bernard (2011) Research Methods in Anthropology: Qualitative and Quantitative Approaches (Fifth Edition), Rowman and Littlefield Publishers

Blauw, Sanne, (2018) The Number Bias: How Numbers Lead and Mislead Us, Foreward (pp. 2-7)