RESEARCH METHODS

IE University
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Academic year: 22-23
Degree course: THIRD
Semester: 2º
Category: COMPULSORY
Number of credits: 6.0
Language: English

PREREQUISITES
No prerequisites required

SUBJECT DESCRIPTION
The course is an introduction to the principles and methods of data collection and analysis in social science research. It is designed for students with little or no past training in quantitative or qualitative research methods.

The course is split into two parts:

1. The first part introduces students to **qualitative research methods** such as interviews, focus groups and participant observation. Students will learn how to collect, analyze and interpret such qualitative data.

2. The second part of the course covers **quantitative research methods**. Topics include questionnaire design, descriptive statistics, basic ideas of inference, an introduction to correlation as well as designing tests for causal inference.

This course helps students learn how to use quantitative or qualitative data to answer their research questions. Through an in-depth examination of different methods and approaches, students will gain a detailed understanding of the different methods available to them for collecting, selecting and analyzing data. And of course, there will be plenty of opportunity for practical application.

What is the big picture? Quantitative and qualitative methods are more than a handful of tools; it is a systematic way of thinking. Students will learn to identify strengths and limitations of specific research designs and propose ways to address the limitations. Students will also learn to analyse data, interpret the basic results of these analyses and make recommendations based upon them. Further, students will be equipped with the knowledge to present their analyses in a comprehensive way.

OBJECTIVES AND SKILLS
After completing this course, students will:

1. have the practical and reasoning skills needed to conduct research

2. understand the variety and key issues of quanitative and qualitative methods for data

collection and analysis

3. be able to formulate a suitable research design with appropriate methodolgy for their final year project

METHODOLOGY

Students are expected to read the compulsory readings **in preparation** for discussions and in-class work. Additional supplementary readings will be suggested based on interest and need throughout the course.

The sessions will be interactive and students have to participate actively. This means contributing thoughtful comments that are likely to enhance other students' understanding, as well as listening respectfully to what other students have to say. Students' active contribution will be part of their assessment.

In addition to interactive lecture and discussions, students can expect to complete a number of practical exercises and to analyse qualitative and quantitative data.

(Please note that specific elements of the course might be subject to change).

Teaching methodology	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	26.67 %	40 hours
Discussions	13.33 %	20 hours
Exercises	26.67 %	40 hours
Group work	13.33 %	20 hours
Other individual studying	20.0 %	30 hours
TOTAL	100.0 %	150 hours

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Introduction to the course and qualitative research methods

Overview of the course and assessment.

Why do we need research methods? What different types of methods exist? Aligning research objectives with methods: How to decide which method to use. We review the foundations, main characteristics and rationale for conducting qualitative research.

Book Chapters: Alan Bryman - Social Research Methods - Chapter 2 (Social Research Strategies) (See Bibliography)

Book Chapters: Research design: Qualitative, quantitative and mixed methods approaches. Chapter 1: The Selection of a Research Approach

SESSION 2 (ASYNCHRONOUS)

Team work 1

Brainstorm and formulate Qualitative research questions for your team project. Further instructions to follow.

Book Chapters: Alan Bryman: Social Research Methods, Chapter 4: Planning a research project and formulating research questions (See Bibliography)

Focus on pages 85 - 91 in the reading ("Formulating suitable research questions")

SESSIONS 3 - 4 (LIVE IN-PERSON)

Interviews

In this session, we focus on interviews as key techniques to collect data in qualitative research. Students will be introduced to key practical, theoretical and ethical issues in the process of interviewing. Strength and weaknesses of the interview approach, biases that might occur, how to construct a topic guide for high-quality data.

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Interview Guide Exercise

Prepare a interview guide to conduct a qualitative interview. More information to follow.

Book Chapters: Alan Bryman: Social Research Methods, Chapter 20: Interviewing in qualitative research (See Bibliography)

SESSION 5 (LIVE IN-PERSON)

Focus Groups

During this session we will recreate focus groups using the topic guide you developed in the previous session.

Book Chapters: Alan Bryman - Social Research Methods - Chapter 21 (Focus Groups) (See Bibliography)

SESSION 6 (ASYNCHRONOUS)

Learning from Extreme Consumers

Learn about the downside of interviewing and focus groups, about alternatives to traditional approaches. Prepare the exercise on 'Learning from Extreme Consumers'. You will be expected to briefly report on your key findings and learnings from the exercise.

More information to follow.

Practical Case: Learning from extreme consumers (HBS 314086-PDF-ENG)

SESSIONS 7 - 8 (LIVE IN-PERSON)

Brief discussion of findings from the previous practice session.
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Ethnography and Participant observation

Participant observation, research design and data analysis. In this session, we will focus on observation. The emphasis for observation is on the process of moving from recording observations to interpretation of social interaction.
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Qualitative Data Analysis

What do we do once we have collected the qualitative data? Introduction to the practice of text data analysis. How do we conduct thematic analysis? What makes a good thematic analysis?

Book Chapters: Alan Bryman - Social Research Methods - Chapter 19 (Ethnography and Participant Observation) (See Bibliography)

Book Chapters: Alan Bryman - Social Research Methods - Chapter 24 (Qualitative data analysis)

(See Bibliography)

SESSION 9 (ASYNCHRONOUS)

Thematic Analysis Exercise

Analyse text data using Thematic Analysis. More information to follow.

SESSION 10 (LIVE IN-PERSON)

Digital Media / Automated Analysis

In this session you will get an overview of digital media research and automated text analysis.

Book Chapters: Alan Bryman - Social Research Methods - Chapter 28 (e-research: Internet Research Methods) (See Bibliography)

SESSION 11 (LIVE ONLINE)

Guest lecture!

An applied qualitative researcher will share his industry experience.

SESSION 12 (ASYNCHRONOUS)

Assessed Quiz 1

Multiple choice about the content of the previous sessions. More information to follow.

SESSIONS 13 - 14 (LIVE IN-PERSON)

Qualitative Research Project Presentations

No reading required

SESSIONS 15 - 16 (LIVE IN-PERSON)

Introduction to Quantitative Methods

In the second part of the course we will start with an introduction to quantitative methods: what are the techniques and key principles, and what sort of data do you get?

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Sampling and measurement

How to select a sample that is representative. Objectivity, reliability and validity in research. Different types of variables and their measurement level.

Book Chapters: Alan Bryman - Social Research Methods - Chapter 7 (the nature of quantitative research) (See Bibliography)

Book Chapters: Statistical Methods for the Social Sciences. Chapter 2: Sampling and Measurement (See Bibliography) (ced)

Book Chapters: Alan Bryman - Social Research Methods - Chapter 8 (sampling) (See Bibliography)

SESSION 17 (ASYNCHRONOUS)

Team work 2.

Brainstorm and formulate research questions for Quantitative Research for your team project. Operationalise the concepts you want to measure and test based on the previous 'measurement' session. Further instructions to follow.

SESSIONS 18 - 19 (LIVE IN-PERSON)

How to design a high quality survey

In this session we will cover how to develop high-quality, unbiased surveys for correlational and experimental research.

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Team work 3.

Create a survey for your team project and give feeback to other teams based on the previous session. More information to follow.

Book Chapters: Alan Bryman - Social Research Methods - Chapter 11 (Asking Questions) (See Bibliography)

Article: Self-reports: How the questions shape the answers (American Psychological Association, Vol. 54, No. 2, 93-105) (ced)

Article: BSAIKRISHNA: Importance of question sequence in MR questionnaire design (Brandalyzer, APRIL 11, 2014)

SESSION 20 (LIVE IN-PERSON)

Descriptive Statistics: How to use your data for describing phenomena

In this session students will learn how to describe quantitative data for categorical and continuous variables with tables and graphs. This will include frequency distributions, histograms, basic knowledge about descriptive indicators like the mean, median, mode and measures of variability.

Book Chapters: Statistical methods for the social sciences. Chapter 3: Descriptive Statistics (See Bibliography)

Book Chapters: Alan Bryman - Social Research Methods - Chapter 15 (Quantitative Data Analysis) (See Bibliography)

SESSION 21 (ASYNCHRONOUS)

Data analysis exercise 1: Descriptive Statistics

More information to follow.

SESSION 22 (LIVE IN-PERSON)

Inferential statistics: How to make predictions and test hypotheses

How to come up with and test a research hypothesis; the principles of significance testing. How to measure linear associations between two variables (correlation).

Book Chapters: Statistical Methods for the Social Sciences. Chapter 6: Statistical Inference: Significance Tests (See Bibliography)

Book Chapters: Statistical Methods for the Social Sciences. Chapter 5: Statistical Inference: Estimation. (Optional background reading) (See Bibliography) (Optional)

SESSION 23 (ASYNCHRONOUS)

Data analysis exercise 2: Inferential Statistics

More information to follow.

SESSION 24 (LIVE IN-PERSON)

How to investigate relationships between two or more variables (Correlation and linear regression analysis)

Book Chapters: Statistical Methods for the Social Sciences. Chapter 9: Linear Regression and Correlation (See Bibliography)

Article: Statistical Methods for the Social Sciences. Chapter 11: Multiple Regression and Correlation (Optional advanced reading) (See Bibliography) (Optional)

SESSION 25 (ASYNCHRONOUS)

Data Analysis Exercise 3: Correlations

More information to follow.

SESSIONS 26 - 27 (LIVE IN-PERSON)

Causal Inference: How to design experiments

How to design and conduct experiments for causal inference. Distinguishing causality from correlation.

How to analyse experimental data: comparing two or more groups

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Recap of quantitative research methods and research project surgery (Q&A).

More information to follow.

Book Chapters: Alan Bryman - Social Research Methods - Chapter 3 (Research Designs) (See Bibliography)

Book Chapters: Statistical Methods for the Social Sciences. Chapter 7: Comparing Two Groups (See Bibliography)

Book Chapters: Statistical Methods for the Social Sciences. Chapter 12: Comparing Groups: Analysis of Variance (ANOVA) Methods. (optional advanced reading) (See Bibliography) (Optional)

Article: John Bohannon: I Fooled Millions Into Thinking Chocolate Helps Weight Loss. Here's How. (Optional reading) (GIZMODO, 5/27/15) (Optional)

SESSION 28 (LIVE IN-PERSON)

Assessed Quiz 2

Multiple choice test about the quantitative sessions. More information to follow.

SESSIONS 29 - 30 (LIVE IN-PERSON)

Quantitative research project presentations

Group presentation of a quantitative research project. Prepare and deliver a presentation detailing your quantitativeresearch project (specific details about this will be provided in due course).

No reading required

BIBLIOGRAPHY
Compulsory

 - Bryman, A.. (2021). *Social Research Methods.* 6th edition. Oxford University Press. ISBN 9780198796053 (Printed)

 - Alan Agresti, Barbara Finlay (Author). (2018). *Publication:Statistical methods for the social sciences..* 1st edition. Pearson. ISBN 9781292220314 (Printed)

EVALUATION CRITERIA

Evaluation is based on:

- Participation: Active participation in the sessions (20%)
- Quiz 1 about qualitative research methods (20%)
- Group project 1: presentation of a **qualitative** research project (20%)
- Quiz 2 about quantitative research methods (20%)
- Group project 2: presentation of a **quantitative** research project (20%)

Evaluation for each component will be discussed in greater detail prior to each assignment.

Criteria	Percentage	Comments
Class Participation	20 %	Participation
Multiple Choice Quiz	20 %	Assessed Quiz 1 (qualitative research)
Group Presentation	20 %	Group Presentation
Multiple Choice Quiz	20 %	Assessed Quiz 2 (quantitative research)
Group Presentation 2	20 %	Group Presentation of quantitative research project

Class Participation (20%)

Active participation in class discussions and activities is an important component of this course. Listening carefully is as important a component of participation as speaking. Please be aware of your own style of participation: if you find it difficult to speak up in class, push yourself to do so. If you realize you tend to dominate discussions, make a point of listening to others.

Class participation helps me assess whether you understand a concept, and are able to constructively build on it. Three main criteria will be used in reaching a judgment about your class participation:

1. Depth and Quality of Contribution: The most important dimension of participation concerns what it is that you are saying. A high quality comment reveals depth of insight, rigorous use of case evidence, consistency of argument.

2. Moving Your Peers' Understanding Forward: Great ideas can be lost through poor presentation. A high quality presentation of ideas must consider the relevance and timing of comments, and the flow and content of the ensuing class discussion. It demands comments that are concise and clear, and that are conveyed with a spirit of involvement in the discussion at hand.

3. Frequency: I would like everyone in the class to participate frequently in the discussions, but only as long as there is something new to say. In particular, one must be especially careful

that quality is not sacrificed for quantity. If anything, claiming more than a fair share of "airtime" without adding anything to the discussion will lower your participation grade.

Finally, your attempts at participation should not be such that the instructor has to "go looking for you". You should be attempting to get into the debate on a regular basis.

You should expect to receive below a 7 if you come to class consistently unprepared; are disruptive (this includes having to be repeatedly asked to put away devices or pay attention); do not participate at all or do not do so in a positive, thoughtful, and considerate way; or in any other way do not contribute positively to the learning atmosphere.

To receive a 7 or above you must come to class consistently prepared and contribute thoughtfully and positively to class activities and discussions. The difference between a 7 and a 10 is based on the level of analysis, thoughtfulness, responsiveness, and originality in your contributions, as well as your respect for the contributions of others. The average level of participation usually satisfies the criteria for a "7", which would correspond to a "B".

Assessed Quiz 1 (qualitative research methods) (20%)

This quiz (multiple choice, open book) will help me evaluate the extent to which you were able to follow the qualitiative part of the course course, and whether you can use this learning to make specific decisions. The purpose of the quiz will be to test your level of understanding, as well as your ability to take decisions based on the topics covered in the first part of the course.

Group Presentation of Research Project 1 (qualitative research methods) (20%).

This presentation will help me evaluate whether you can create a compeling qualitative research project to solve a real problem, and also whether you are able to present in convincingly. Most of the times, the interest of an audience on what you have to say (e.g., in a meeting) is not given, but something that must be earned. In this assignment, each group will have to convince the class audience that they know what they are doing, regarding a qualitative research project. Convince your classmates that your research project is interesting, important, and was executed correctly. This research problem can be anything that any business/non-profit/goverment agency etc. might be interested in finding out.

Assessed Quiz 2 (quantitative research methods) (20%)

This exam will help me evaluate the extent to which you were able to follow the second part of the course, and whether you can use this learning to make specific decisions. After the second part of the course (quantitative research methods), you will take a second quiz. The purpose of the quiz is to test your level of understanding, as well as your ability to take decisions based on the topics covered in the course.

Group Presentation of Research Project 2 (quantitative research methods) (20%).

This will be the same as the first project, but focussing purely on quantitative research methods. You and your team are expected to collect high-quality quantitative data and analyze it appropriately to make sound recommendations.

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or "re-sit") in June/July.

Students who do not comply with the 70% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

Regarding to the newly implemented ´liquid learning´ model, all students must still abide by the same IEU attendance policy, including those students who are connecting remotely to class sessions and not physically in the classroom because they are unable to be physically in Spain, on campus. During the sessions, students connecting remotely are required to fully connect their camera and microphone at all times, and must actively participate during the sessions (using all necessary audiovisual equipment), just as their fellow peers who are physically present in the classroom on campus.

The **<u>Extraordinary Call Evaluation</u>** criteria will be subject to the following rules:

ØStudents failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).

ØIt is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e.g. internships, trips, holidays, etc.)

ØThe June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e.g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., "notable" in the extraordinary call.

ØRe-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

! Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects. !

In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

PROFESSOR BIO

Professor: **LAURA ZIMMERMANN**

E-mail: lzimmermann@faculty.ie.edu

LAURA ZIMMERMANN

Dr Laura Zimmermann is an Assistant Professor in Behavioral Science at IE University's School of Human Sciences and Technology. Before earning a PhD in Management from the London School of Economics and Political Science, Laura received an MSc and BSc in Psychology from the University of Regensburg in Germany.

Laura's research investigates consumer behavior. She is interested in understanding what factors influence consumers' decision-making processes and how to improve decisions with a specific focus on health-related behaviors and the role of technology. For her research, she is using lab and field experiments as well as large-scale, cross-sectional surveys and RCTs.

Previously, Laura has been teaching classes and seminars at LSE and Peking University for Undergraduate, Masters and Executive students as well as Summer School students. Her teaching covers several business and behavioral science modules, including courses in Marketing, Consumer Behavior, Judgment and Decision Making for Management, Decision Analysis and Entrepreneurship.

OTHER INFORMATION

IE email address: laura.zimmermann@ie.edu

Office hours: There will be a virtual office hour (day and time to be confirmed), or as otherwise arranged via Email. Please note that there might be slight changes for some weeks. You will be informed via Campus Online about any changes.