

Syllabus

COM-2203: QUANTITATIVE RESEARCH METHODS

Spring, 2018

Instructor: Petra Kiss

Course Section/Time:

1) COM-2203, Thursdays, 14:15 – 17:30

ABOUT THE COURSE:

Quantitative Research Methods provides an overview of the concepts, methods, and tools by which social and communication research is designed, conducted, interpreted, and evaluated. The primary goals of this course is to develop skills in gathering, organizing, interpreting and presenting research information by understanding and using the right research methods.

During the quantitative research methods course students will learn the basics of quantitative research:

- how to make research design
- how to interpret descriptive statistics
- how to interpret data and formulate conclusions from the research
- planning and writing research report

COURSE GOALS AND OBJECTIVES:

Students can design a quantitative research study

- Hypothesis: Students can formulate research hypothesis connecting to their research topics
- Students can plan research design appropriate to their research question.
- Measures: students can find or create appropriate research measures, and understand the challenges with validity and reliability.
- Students can write well-structured research questions and hypotheses.
- Sampling: students can perform random and non-random sampling techniques and understand the advantages and disadvantages of each; they are able to choose the right sampling connecting to their research topic
- Data interpretation: students can formulate conclusions based on the research, using the results of statistical analysis.

Statistics: students can use descriptive statistics, analyze and interpret the results of these statistics, and can conclude the results in a research report.

REQUIRED READING:

Babbie, Earl (2014). *The Practice of Social Research (14th Edition)*.

Printed handouts given during the course

Recommended reading:

Aronson, Elliot (2012). *The Social Animal (11th Edition)*.

COURSE REQUIREMENTS

Assignments: All Home Assignments help students to reach the course's primary goal, to develop skills in gathering, organizing, interpreting and presenting research information. Therefore, Home Assignments are part of the course's grading.

Exams: Requirement of Midterm Exam is to design a quantitative research study appropriate to the field of communication, in which students formulate research hypothesis and cover the details of sampling and evaluated research questions.

For the Final Exam student will provide a research questionnaire elaborated in detail on an optional research topic and write and present a Research Paper based on a primary database.

Grades:

5 Homework assignments (each HA 20 pts) = $20 \times 5 = 100$ pts

Midterm Exam = 50 pts

Final Exam (elaborated research analyzed and interpreted in a research report format and presented in ppt) = 150 pts

Total possible points = 300 pts

The course consists of 3 Units, they are as follows:

1: Introduction in social research and research methods

- Introduction into social research
- research traditions, such as:
 - How we know what we know (tradition, authority, intuition (introspection), scientific inquiry (observation))
 - Types of evidence (opinion, self-reported, empirical, physical)
 - Relationships between variable (correlation vs. causation)
 - Types of variables: independent vs dependent; nominal, ordinal, interval or ratio.

2: Research methodologies

- Quantitative (counting and observing) vs. qualitative (asking and observing) description (what), explanation (why), prediction (plan), control (change)
- Research questions and hypotheses
- Research Design, Conceptualization and Operationalization for the research
- Sampling techniques
- Data Collection

3: Statistics and data analyzing

- descriptive statistics and their usability in research Reports
- Significance
- Normal curve (standard deviation, outliers, ...)
- Crosstab construction and analysis