

# Quantitative and Computer-Assisted Approaches in Content Analysis

Prof. Dr. Matthias R. Hastall

## Course Description

Text analysis and content analysis techniques are powerful research methods for extracting and interpreting the meaning of documents such as news articles, speeches, social media postings, or videos sequences. Two approaches, quantitative content analysis and computer-based (e.g., dictionary-based) text analysis, are introduced, examined, and then applied in course projects. Theoretical foundations, issues of validity, reliability, and subjectivity, as well as data analysis and presentation strategies will be covered, and the approaches will be contrasted regarding their potential to answer a wide range of research questions. The benefits of using free and commercial content analysis software will be also examined. The course is introductory; however, a very basic knowledge of quantitative research methodology is beneficial. Participants are encouraged to try out different tools on their own computers (preferably running Microsoft Windows as operating system, as most tools are available for this computer platform), and are invited to present and discuss their own content analysis projects.

## Schedule (Overview)

The course takes place daily from September 16-20, 2024, as a ZOOM meeting. We will start at 09:30 am (sharp). The course consists of theory sessions and practice sessions. We will usually start with a theory session at 9:30 am, and finish with practice sessions (group assignments or individual assignments) at about 3:30 pm.

**Important: All course times refer to the Istanbul time zone (TRT/UC +3).**

## ZOOM Link

The ZOOM links for each session will be posted in our ABU eLearning system.

## Preliminary Schedule

Please note that this schedule is preliminary. We will make several adjustments depending on the course participants' research interests and course progress.

<b>1</b>	<b>DAY 1</b>
<b>1.1</b>	<b>Introduction</b>
1.1.1	Our Course: Backgrounds, Experiences, Interests
1.1.2	Course Schedule
1.1.3	Reading Assignments
1.1.4	Recommended Readings
1.1.5	Hardware and Software Recommendations
<b>1.2</b>	<b>Content Analysis THEORY</b>
1.2.1	Definition
1.2.2	History
1.2.3	Purposes, Applications, Examples
1.2.4	Steps
1.2.5	Units and Unit Definitions
1.2.6	Codebook, Categories and Levels
<b>1.3</b>	<b>Content Analysis IN PRACTICE</b>
1.3.1	Coding Material Retrieval/Collection
1.3.2	Research Questions
1.3.3	Codebook Development
<b>2</b>	<b>DAY 2</b>
<b>2.1</b>	<b>Content Analysis THEORY</b>
2.1.1	Validity
2.1.2	Reliability
2.1.3	Sampling
<b>2.2</b>	<b>Content Analysis IN PRACTICE</b>
2.2.1	Refining and Finalizing the Codebook
2.2.2	Pretesting/First Coding
2.2.3	Determining Intercoder Reliability
<b>3</b>	<b>DAY 3</b>
<b>3.1</b>	<b>Content Analysis THEORY</b>
3.1.1	Preparations for Data Analysis
3.1.2	Data Analysis Strategies

3.1.3	Data Presentation
3.1.4	Data Interpretation
<b>3.2</b>	<b>Content Analysis IN PRACTICE</b>
3.2.1	Coding
3.2.2	Data File Preparation
<b>4</b>	<b>DAY 4</b>
<b>4.1</b>	<b>Computer-Assisted Content Analysis THEORY</b>
4.1.1	Introduction
4.1.2	Prerequisites
4.1.3	Approaches
4.1.4	Limitations
4.1.5	Examples
<b>4.2</b>	<b>Computer-Assisted Content Analysis IN PRACTICE</b>
4.2.1	Preparation of Documents
4.2.2	Word Clouds
4.2.3	Dictionary Creation
4.2.4	Keyword in Context (KWIC) Analysis
4.2.5	Dictionary Choice and Application
4.2.6	Data File Preparation
<b>5</b>	<b>DAY 5</b>
<b>5.1</b>	<b>Content Analysis IN PRACTICE</b>
5.1.1	Method Section: Method Description
5.1.2	Data Analysis: Frequencies
5.1.3	Data Analysis: Chi <sup>2</sup> Tests
5.1.4	Data Analysis: t-Test
5.1.5	Data Presentation: Graphs, Tables, Texts
<b>5.2</b>	<b>Summary: Where Do We Stand, and Where Do We Go From Here?</b>
<b>5.3</b>	<b>Course Reflection, Course Evaluation, and Good-Bye</b>

## Literature/Reading Assignments

Literature assignments and recommendations are posted in our ABU eLearning system.