Research Project

COURSE CONTENT:

- 1. The Concept of a Research Project
 - o Structure of a research project, guidelines for writing chapters
- 2. Characteristics of Scientific Research and Writing
 - o Criteria for selecting a research topic, methods, and tools for literature search and review
- 3. Defining the Field of Study and Research Focus
 - o Identifying the research gap or problem, importance of research design
- 4. Formulating Research Questions
 - o Importance of properly defining research questions
- 5. Setting Research Objectives and Goals
 - o Identification, organization, and critical analysis of relevant data
- 6. Building a Theoretical Framework and Scientific Documentation
 - o Writing techniques for scientific justification
- 7. Research Methodology
 - Selecting the appropriate methodology
- 8. Writing and Presenting Results
 - o How to present findings effectively

Detailed Description of Units:

In **unit 1**, students are introduced to the concept of scientific research. They understand that the goal of science is to describe and interpret phenomena, following a specific methodological path and rules.

In **unit 2**, students explore the fundamental characteristics of a research project and scientific research, including the systematic study of empirical reality, discovery of new knowledge, identification of new principles, theory formulation, and documenting these in a scientific study. They also learn about criteria for choosing a research topic and tools for literature search and review.

Unit 3 covers the definition of basic concepts such as law, principle, theory, model, and hypothesis, emphasizing the importance of identifying the core research topic. Students also gain an understanding of the value of sound methodological design.

In **unit 4**, the process of formulating research questions is outlined. Emphasis is placed on precise question formulation and how this guides the research direction and methodological design.

Unit 5 examines the purposes and goals of a research project, explaining that these direct the research process and are adjusted based on data. Methods for studying relevant research in the field and analyzing their data are also discussed.

In **unit 6**, students learn how to build and conceptualize the theoretical framework for their project, approaching scientific topics, substantiating related research, and connecting it with the identified research gap.

Unit 7 introduces research methodology, defining types of research according to research questions and goals. Research protocols and the methodological principles guiding them are also studied.

Unit 8 emphasizes the writing, analysis, interpretation, and study of research findings. It covers the basic principles of presenting results, showing how they answer research questions and lead to conclusions.