
GUIDEBOOK FOR YOUNG RESEARCHERS

Proposed content:

### CHAPTER 1: Research Methodology
University in charge: University of Novi Sad
- Introduction to research and research methods
- Types of researches
- Research approaches
- Research philosophies
- Research methodologies
- Positivistic methodologies (surveys, experimental, longitudinal and cross-sectional studies)
- Phenomenological methodologies (case studies, action research, participant observation, etc.)
- Research process (research phases and steps)
- Basic, applied and evaluation research
- Multidisciplinary and interdisciplinary research
- Defining research subject, question and hypothesis
- Using sources and managing informations

### CHAPTER 2: Processing, Analysis and Interpretation of Research Results, University in charge: University of Kragujevac
- Data collection in research programs and surveys
- Data acquisition in experiments
- Introduction to data mining techniques
- Statistical methods for data and results analysis and processing
- Other methods for data analysis and processing
- Preparation of graphs and tables
- Preparation of pictures
### CHAPTER 3: Ethics and Responsibility in Scientific Research
University in charge: University of Nis

- Ethics in research
- Western and eastern perspectives of ethics
- Major ethics issues in research (copyrights, patents, privacy, information sharing...)
- Guidelines for ethical practices in research
- From unethics to ethics in research
- Responsibilities of scientists and institutions

### CHAPTER 4: Scientific and Technical Communication
University in charge: University of Belgrade

- Types and elements of scientific and technical communication
- Team working and communication
- Letter, memos and e-mails
- Presentations
- Reports, instructions, proposals, documentation
- Conference report and poster presentations
- Oral paper presentation

### CHAPTER 5: Writing & Publishing of Scientific Paper
University in charge: University of Montenegro

- Introduction to scientific writing
- Types of scientific papers (original research article, review paper, case report, letter to editor, etc.)
- Title, Authors list, Abstract
- Introduction, Materials and Methods
- Results and Discussion
- Acknowledgments, References citation
- Journal selection and submission
- Review process and publishing
- English language in scientific papers
- Abbreviations
### CHAPTER 6: Writing PhD thesis
University in charge: University of Tirana

- Introduction
- Stages in thesis writing
- Planning thesis and research
- Organization of thesis structure
- Data analysis and interpretation
- Findings presentation
- Thesis finalization
- Defending PhD thesis

### CHAPTER 7: Introduction to Academic Teaching
University in charge: University of Vlora

- Understanding teaching and learning processes
- Planning teaching and learning
- Curriculum design and development
- Teaching in small and large groups
- E-learning
- Supervising projects and dissertation
- Supervising research students
- Key aspects of teaching in various disciplines (science, engineering, language, medicine, social sciences, etc.)
- Teaching quality, standards and excellences
### CHAPTER 8: Research Projects Planning and Managing
University in charge: University of East Sarajevo

- Projects management in research and development
- Fundamentals of project management
- Research and development projects
- Projects with/for companies
- EU funded projects types
- Preparation of project application (activities, budgeting, LFM, etc.)
- Research projects life cycle
- Managing cost, time and quality in research projects
- Managing risks in research projects

### CHAPTER 9: Career Starting and Planning
University in charge: University of Sarajevo

- Setting career goals
- Career planning and management
- CV preparation
- Application letters
- Professional portfolio
- Interview preparation
- Employment opportunities
- Research jobs offers
- Social networks LinkedIn, Research Gate

- Each partner university will be responsible for one book chapter.
- UNI will be responsible for review, printing and publishing
- Each university should propose changes in title and/or content of proposed chapters
- Each university should express their interest in subject (book chapter) they would like to be in charge for preparation
- Technical details and instructions for book writing will be defined (Springer standard)
- Joint literature collection and sharing