## **Empirical Paper Learning Outcomes**

## Knowledge

- The student knows the theoretical bases for statistical analyses of results from empirical studies: the logical and philosophical bases of empirical research; probability; operationalization of psychological variables.
- Knows basic statistical methods used to describe variables, describe relationships between variables, and to verify research hypotheses through inferential statistics.
- Understands the scientific method in the context of empirical sciences, its advantages and limitations.
- Is acquainted with specific scientific psychological terminology, distinguishes theoretical from operational concepts.
- Knows the main methods of measurement of mental properties. Knows the assumptions and postulates of classic and contemporary psychometrics.
- Knows the basic concepts of intellectual property and uses them in academic life.

## **Skills**

- The student is able to find, analyse, evaluate, select and integrate information using various sources, also from fields of knowledge beyond psychology, and from critical judgements on its basis, as an exit point to planning his own studies.
- Can formulate research questions and hypotheses, and operationalize them. Can create a research plan adequate to the research question.
- Presents research questions with statistical concepts and translates them to hypotheses, which he then verifies using appropriate methods of statistical inference.
- Has advanced research skills encompassing construction of research tools and conducting experiments, which allow for solving complex problems in various fields of psychological research.
- Has advanced oral presentation skills, in Polish or a foreign language, on various topics within psychology, and can prepare a presentation in the form of a research report or conference poster.
- Uses computer programs: statistical packages, calculation spreadsheets, text editors, to perform calculations and describe results from empirical studies.
- Can determine the ethical value of his own research and scientific pursuits.
- Can conduct substantive argumentation, utilizing personal views that are based on critical analysis of works from various fields of knowledge, and can create synthetic summaries on their basis.
- Can critically analyse popular psychological publications and separate views based on common sense from scientific data.

## **Social competencies**

- The student is prepared and has the foundations to conduct independent empirical research. Presents and evaluates their results responsibly, critically and objectively.
- Communicates about data and conclusions from research understandably, using adequate indicators, tables, and graphs.
- Understands ethical standards for scientific research, uses them, following principles of scientific integrity. Is aware of and follow the basic principles of behaviour in an academic community.
- Is able to present a critical opinion concerning psychological materials presented in the media.
- Recognizes that the complex nature of links between psychological research and other fields of knowledge causes these fields to be in constant development, which as a consequence requires constant learning and updating knowledge.