

**INTRODUCTION TO PSYCHOLOGY**  
**Assoc. Prof. Dr. Ludmilla Andreeva**  
**(30 hours)**

**Prerequisites**

None.

**Exam information**

Test with multiple choice items.

The course aims at introducing students to psychology, familiarizing them with some of the basic assignments they will face in their studies at the University and with the basic principles of critical thinking, to acquaint them with the two basic forms of scientific studies used by psychologists: observations and experimental research. The emphasis is on the development of scientific skepticism and the practice of critical thinking which does not limit itself to carping and faultfinding but relies on scientific evaluation of evidence, i.e. the development of those intellectual skills which prevent researchers from gullibility and acceptance of pseudo-scientific statements or absurd ideas as scientific truths.

**1. Practical issues of students' work**

Types of tests: essays and multiple choice tests. Preparing for an exam. Preparing papers and reports. Using outlines: research, work, formal. How to develop a thesis statement if the topic is not assigned. Good and poor theses. Using evidence: good and poor use of evidence. Citations as a special type of evidence. Citing and documenting sources in scientific works. Plagiarism. Appropriate and inappropriate use of others' words and ideas. Plagiarism and Internet.

**2. The science of psychology**

The Freud problem. The diversity of modern psychology. Implications. Unity in science. What is science? Systematic empiricism. Publicly verifiable knowledge: replication and peer review. Empirically solvable problems. Psychology and folk wisdom: the "common sense" problem. Psychology as a young science.

**3. Falsifiability**

Theories and the falsifiability criterion. Freud and falsifiability. Falsifiability and the folk wisdom. The freedom to admit a mistake. Errors in science.

**4. Operationalism and essentialism**

Why scientists are not essentialists? Essentialists and operationists. Reliability and validity. Direct and indirect operational definitions. Evolution of scientific concepts. Operational definitions in psychology. Operationalism as a humanizing force. Essentialist questions and the misunderstanding of psychology. Operationalism and the phrasing of psychological questions.

**5. Testimonials and case studies evidence**

The place of the case study. Why testimonials are worthless? The vividness problem. The impact of the single case. Testimonials open the door to pseudoscience.

**6. Correlation and causation. Control**

The third-variable problem. The directionality problem. Selection bias. Comparison, control, and manipulation. The importance of control groups. The Clever Hans. Separating variables. Intuitive physics. Intuitive psychology.

**7. The artificiality criticism and psychology**

Why natural is not always necessary? The "random sample" confusion. Theory-driven research vs. direct applications. Applications of psychological theory. The "college-sophomore" problem.

**8. The importance of converging evidence**

The connectivity principle. The Great-Leap model vs. the Gradual-Synthesis model. Converging evidence: напредък въпреки недостатъците. Converging evidence in psychology. Scientific consensus. Methods and the convergence principle. The progression to more powerful methods.

### **9. The issue of multiple causation**

The concept of interaction. The temptation of the single-cause explanation.

### **10. Probabilistic reasoning**

Statistics. Probabilistic reasoning and the misunderstanding of psychology. Psychological research on probabilistic reasoning. Insufficient use of probabilistic information. Failure to use sample size information. The Gambler's Fallacy. Statistics and probability.

### **11. The role of chance in psychology**

The tendency to try to explain chance events. Explaining of chance: illusory correlation and the illusion of control. Chance and psychology: coincidence, personal coincidences. Accepting error in order to reduce error: clinical vs. actuarial prediction.

### **12. Psychology problems and the other sciences**

Psychology's image problem. Psychology and parapsychology. The self-help literature. Recipe knowledge. Psychology and other disciplines. Psychology's worst enemies. Everyone as a psychologist: implicit theories of behavior. The source of resistance to scientific psychology.

## **CORE READING**

Stanovich, K. E. (2010). *How to Think Straight About Psychology*. Boston, MA: Allyn & Bacon.

Lilienfeld, S. O., Lynn, S. J., Ruscio, J., & Beyerstein, B. L. (2010). *50 Great Myths of Popular Psychology: Shattering Widespread Misconceptions about Human Behavior*. New York: Wiley-Blackwell.