

DEPARTMENT OF PSYCHOLOGY  
FACULTY OF ARTS  
PALACKY UNIVERSITY IN OLOMOUC  
CZECH REPUBLIC

# ENGLISH COURSES

☞ available only in spring semester ☞

Our department offers three types of courses in the English language. “**Basics of Research**” provides students with two basic courses in research and data analysis. “**Laboratory Specials**” are courses where students get up-to-date knowledge and skills in cyberpsychology, psychophysiology, or human factors in traffic. A bonus of these courses is the opportunity to use our well-equipped and unique laboratory with virtual reality gadgets, the EEG, and other equipment. Suitable especially for more advanced students, the “**Advanced Specials**” courses, deal with organisational culture, the psychology of values, or thinking and decision making in the real world.

*Courses marked with \* are available only for psychology students.*

*Unmarked courses are available for all students, regardless of the main subject of their studies.*

## BASICS OF RESEARCH

- ✓ METHODOLOGY OF PSYCHOLOGICAL RESEARCH – RESEARCH PROPOSAL
- ✓ BASICS OF DATA ANALYSIS FOR SOCIAL SCIENCES

## LABORATORY SPECIALS

- ✓ CYBERPSYCHOLOGY\*
- ✓ GENERAL PSYCHOPHYSIOLOGY\*
- ✓ HUMAN FACTORS IN TRAFFIC

## ADVANCED SPECIALS

- ✓ THINKING AND DECISION MAKING IN PRACTICE
- ✓ EDUCATIONAL PSYCHOLOGY\*

**Check the course codes and more information here:**

<http://psych.upol.cz/en/studium/english-courses-in-english/>

*Please find below the description for each course.*

**COURSE TITLE:                    METHODODOLOGY OF PSYCHOLOGICAL RESEARCH –  
RESEARCH PROPOSAL**

**COURSE TYPE:                   BASICS OF RESEARCH**

**LECTURER:                        Miroslav Charvát**

**MINIMAL NUMBER OF STUDENTS:     3                                    ECTS CREDITS:     3**

#### ABOUT THE COURSE:

To be a good or excellent researcher is not as difficult as one might think. The first step involves finding the right research idea. All you need is to like discussions, common sense, and some courage to share your ideas with colleagues. Through discussion possible errors in specific research plans are identified. You might experience dilemmas or dead ends at this stage, but remember, everything until this point was just a virtual walk and your muscles are still fresh. (We can't say the same about your brain, but cognitive training is good for your mental health.) Once you have your initial research questions defined you can start to move from a rough sketch to a detailed and crafted blueprint. A bit of writing and constructive feedback from your tutor can help a lot. A good proposal should contain a justification for the research, theoretical background, research objectives, a decision about the population and sample, a description of the data collection methods, appropriate analysis methods, ethical issues, and other specifics. The ability you can gain in this course is to write a realistic and persuasive research proposal which can open the chests containing funds and the gates to fame, or, if not, you can at least get a clarified plan for how to conduct your research and write your thesis.

#### COURSE STRUCTURE:

Upon completion of the course, students should:

- know the required form and content of a research proposal;
- understand the main methodological procedures in the field of psychology;
- be able to underpin their research projects theoretically by a relevant bibliographical search;
- be able to formulate a research problem, research objectives, hypotheses, or research questions;
- be capable of analysing the specific research problem, choosing appropriate methods, and giving reasons for their choice;
- be able to assess the quality of other research projects on the basis of relevant criteria.

COURSE TITLE:           **BASICS OF DATA ANALYSIS FOR SOCIAL SCIENCES**

COURSE TYPE:           BASICS OF RESEARCH

LECTURER:               Daniel Dostál

MINIMAL NUMBER OF STUDENTS:    3                            ECTS CREDITS:    3

**ABOUT THE COURSE:**

This course introduces students to the basics of statistical modelling. After attending this course, student will see various statistical procedures as special cases of the general linear model. This approach enables more focused insight into the principles and assumptions of statistical hypothesis testing and parameter estimation with easier to grasp and more natural way for humanities and social sciences students.

*The course assumes basic knowledge of descriptive statistics (e.g. mean and standard deviation) and statistical inference (the logic of the null hypotheses testing with  $p$ -values).*

- The course will cover the following topics:
- Statistical models
- Simple regression analysis and the regression curve
- Parameter estimates, the least squares method
- Determining model quality
- Qualitative independent variables, general linear model
- Interactions
- Curvilinear dependencies
- Null hypothesis tests
- Stepwise and hierarchical regression
- Competences acquired

The course provides students with one versatile tool for dealing with quantitative problems in social science research. After finishing this course students will be able to abandon usage of the most bivariate tests and replace them with more complex regression models.

**REQUIREMENTS ON STUDENTS:**

- Attendance at practical lessons
- Successfully completing assignments

COURSE TITLE: **CYBERPSYCHOLOGY\***

COURSE TYPE: LABORATORY SPECIALS

LECTURER: Jan Šmahaj

MINIMAL NUMBER OF STUDENTS: 3

ECTS CREDITS: 3

#### ABOUT THE COURSE:

The main objective of the Cyberpsychology course is to introduce to students to a “young approach” to psychology. As a result of the progressive development of information and communication technologies in daily life it is nowadays practically a necessity. Students have the opportunity to become familiar with the current knowledge about the human-cyberspace-society interaction. The main topics will focus on the positive, negative, and scientific dimensions of the use of cyberspace and virtual reality with practical implications for the field of psychology. The subject is clearly structured and divided into theoretical and practical parts. The basic terms and theories will be presented to the students. The students will become acquainted with a current overview of cyberpsychology research centres and authors who are engaged in the topic. The practical part of the course will take place in the laboratory of the Department of Psychology, which is equipped with hardware and software for experimental research and the use of virtual reality in the field of psychology. We will focus on discussion and students' active approach during the course. In addition to personal experience with virtual reality systems, the students will be motivated to become involved in group work and create their own experimental situations. The students will also be informed about the possibilities of virtual reality and how it is used in the therapeutic and counselling process but also in related fields such as medicine and neuromarketing.

COURSE TITLE: **GENERAL PSYCHOPHYSIOLOGY**

COURSE TYPE: LABORATORY SPECIALS

LECTURER: Tomáš Dominik

MINIMAL NUMBER OF STUDENTS: 5 ECTS CREDITS: 3

#### ABOUT THE COURSE:

This course will provide an overview of the basic principles, theory, and applications of psychophysiological science. The course has two goals:

- 1) to provide an introduction to the basic theory and research in major areas of human psychophysiology, with an emphasis on the psychophysiological correlates of cognition, affect, and psychopathology; and
- 2) to provide an introduction to laboratory techniques and methodological principles in human psychophysiology.

For this reason, the course is designed around the use of student laboratory devices from the BIOPAC Systems, Inc.

#### COURSE STRUCTURE:

The course will involve a combination of lectures, discussion, and the students' own experiences with demonstrations and practical lessons.

#### Lecture topics:

- basic principles of psychophysiology
- basics of neuroanatomy and neurophysiology
- brain activity and electrodermal activity
- muscle activity and eye activity
- heart activity

For the laboratory exercises the students will be divided into groups. The lessons dealing with measurement are:

- Lesson 1: Standard & Integrated EMG (muscle activity)
- Lesson 2: Components of the ECG (Lead II) (heart activity)
- Lesson 3: Leads I, II, and III & Einthoven's Law (heart activity)
- Lesson 4: EEG Relaxation & Brain Rhythms
- Lesson 5: Alpha Rhythms in the Occipital Lobe
- Lesson 6: GSR and Polygraph
- Lesson 7: EOG Eye Movement, Saccades & Fixation
- Lesson 8: Reaction Time

**HUMAN FACTORS IN TRAFFIC**COURSE TITLE: **WHY WE ACT IN THE TRAFFIC THE WAY WE DO**

COURSE TYPE: LABORATORY SPECIALS

LECTURER: Matúš Šucha

MINIMAL NUMBER OF STUDENTS:: 5 ECTS CREDITS: 3

**ABOUT THE COURSE:**

Did you ever wonder why people act in traffic the way they do? Why do pedestrians jaywalk in New York City and not in Copenhagen? Well, in New York City it's a way to distinguish yourself from the crowd, while in Copenhagen it's an illegal act. In New York City pedestrians look at the cars, not the lights. Or why does sounding your horn in Rome not mean the same thing as sounding it in Stockholm, why is flashing your headlights at another driver understood one way on a German autobahn and quite another way in Los Angeles? How do people drive, how do people cross the street, how are power relations made manifest in those interactions, and what sorts of patterns emerge from traffic? If you have ever asked yourself these questions, this is the course for you to sign up for!

**COURSE STRUCTURE:**

Areas that are covered in the curriculum:

- introduction to traffic psychology and its history
- road users, vulnerable road users and their behaviour
- risky behaviour in traffic and risky groups
- communication between road users
- social and cultural aspects
- the driver's personality and its assessment
- psychological fitness to drive and the ways to assess it
- rehabilitation of drivers
- driving under the influence of drugs (DUI)
- infrastructure design and human factors
- Information Technologies (ITS) in traffic
- education and training in traffic
- prevention and promotion of safety and the promotion of healthy lifestyles

COURSE TITLE: **THINKING AND DECISION MAKING IN PRACTICE**

COURSE TYPE: ADVANCED SPECIALS

LECTURER: Aleš Neusar

MINIMAL NUMBER OF STUDENTS:: 3 ECTS CREDITS: 3

**ABOUT THE COURSE:**

Human thinking and decision making in personal and professional life is hardly ever purely logical or critical as we are often short of information or time or lack the capability to process the vast amount of information. Therefore, we must use various short-cuts, heuristics, or intuition – aids that are of great help but may lead us astray as well. The course is aimed at showing when “fast” intuitive thinking and decision making can be effective and, on the contrary, when it is good to “slow down” so as not to be tricked by, for example, a vendor offering a “bargain mobile phone tariff”. The course covers topics such as:

- slow and fast thinking and decision making;
- the rationality and irrationality of our thinking and decision making;
- limits of the conscious and rational smartness;
- the intuitive and unconscious;
- persuasion and manipulation in everyday life;
- perception of risks and security;
- probability and causality.

**COURSE TITLE: EDUCATIONAL PSYCHOLOGY**

**COURSE TYPE: ADVANCED SPECIALS**

**LECTURER: Lucie Viktorová**

**MINIMAL NUMBER OF STUDENTS:: 5 ECTS CREDITS: 3**

#### ABOUT THE COURSE:

Educational and School Psychology is one of important applied psychological disciplines. Many graduates start their career as school psychologists or in some kind of pedagogical-psychological counselling centre. Therefore, it is important to know about the specifics and different approaches towards learning and education, the various factors which could influence learning (such as motivation, peer group or personality traits) and the common problems or topics discussed when it comes to education. All of that, we will discuss in the course while reflecting and building on your own experiences with learning and education.

#### COURSE STRUCTURE:

Topics covered in the lectures will include the following:

- basic terminology in Educational and School Psychology (so that we understand each other);
- theories and approaches towards learning and education – traditional and „innovative“;
- what we know about learning from behaviourists, cognitive psychologists and brain researchers;
- myths in learning and education;
- the role of motivation in learning and education;
- social context of learning & social phenomena pertaining to life in schools;
- „school success“, standardized testing and what we (can't) measure in education;
- teachers' and students' personality in the learning process;
- work possibilities for a psychologist in the school system.

To complete the course, you will be required to participate in the classroom discussions and activities and write a short essay (2 A4 pages) reflecting on your own learning and educational experiences in the school system.