ЦЕНТЪР ЗА ОБУЧЕНИЕ – БАН
1000 София
ул. „Сердика“ № 4
http://edu.bas.bg
email: tdc-phd@cu.bas.bg
тел.: 02 987 31 67
02 979 52 60

SPECIALIZED DOCTORAL COURSE

Basic Information:

Course Title: Road Safety: Psychological Aspects
Lecturer: Assoc. Prof. Zornitsa Totkova, PhD
Phone: +359 2 979 30 56
Email: z.totkova@iphs.eu
Total Teaching Hours: 30

Annotation:

The course introduces traffic psychology as a scientific and applied field concerned with driver behaviour within the road transport system. It examines the origins, scope and objectives of the discipline, along with classical and contemporary models of driving behaviour. Particular attention is devoted to personality characteristics, cognitive processes and social factors influencing driving. Driving style and traffic safety culture are also considered as psychological constructs linked to safe and risky driving behaviour. The course analyses decision-making, risk appraisal, motivation, self-regulation and the role of emotions in driving. Approaches to shaping and modifying driver behaviour, as well as methods for assessing relevant psychological factors, are presented. The final part addresses the current state, practical applications and future development of traffic psychology in Bulgaria. The course programme comprises 13 two-hour lectures incorporating discussions, the independent preparation of a paper on a selected course topic, and its presentation during a four-hour final session.

Course content:

Module 1: Introduction to Traffic Psychology and Driving Behaviour – 4 hours
- The scope, origins and development of traffic psychology;
- Driving behaviour as an object of psychological research.

Module 2: Theoretical Models and Approaches to the Study of Driving Behaviour – 6 hours
- Classical explanatory models;
- Contemporary theoretical approaches;
- Approaches to shaping and modifying driving behaviour.

Module 3: Psychological Factors Associated with Driving Behaviour – 6 hours
- Personality characteristics and individual differences;
- Cognitive processes involved in driving;
- Social factors and influences on road behaviour.

Module 4: Behavioural and Psychomotor Characteristics of the Driver – 6 hours
- Driving styles and their relationship with driving outcomes;
- Psychomotor functions and their significance for safe driving.
- Assessment methods in transport psychology.

Module 5: Road Safety Culture and Traffic Psychology in Bulgaria – 4 hours

- The nature, determinants and development of road safety culture;
- The current state of research and practice, fields of application and prospects for traffic psychology in Bulgaria;

Final session and presentation of the course paper – 4 hours

Teaching and assessment methods:

The course is delivered in person and combines lectures, thematic presentations, and discussions of specific issues in the field. Assessment is based on a course paper on a topic selected by the participant, prepared during the course and presented at the final session.

Competencies acquired as a result of training:

Upon completion of the course, participants will have acquired knowledge of the subject matter, core concepts, theoretical models and current research directions in traffic psychology. They will be able to analyse the personality, cognitive, social and psychomotor factors that influence driver behaviour, distinguish between different driving styles and evaluate their relationship with risk and road safety. The course will also develop skills in the use of psychological assessment methods and in the processing and interpretation of the results obtained.

Literature:

Totkova, Z. (2023). Traffic Psychology: Personality and Driving Behaviour [in Bulgarian]. Prof. Marin Drinov Publishing House of the Bulgarian Academy of Sciences.
Porter, B. E. (Ed.). (2011). Handbook of Traffic Psychology. Academic Press.
Evans, L. (2004). Traffic Safety. Science Serving Society.
Groeger, J. A. (2000). Understanding Driving: Applying Cognitive Psychology to a Complex Everyday Task. Routledge.
Rothengatter, J. A., & Huguenin, R. D. (Eds.). (2004). Traffic and Transport Psychology: Theory and Application. Elsevier.
Fuller, R. (2005). Towards a general theory of driver behaviour. Accident Analysis & Prevention, 37(3), 461–472.

Additional information:

The proposed course does not overlap in content with the existing specialised courses offered by the BAS Training Centre. At present, there is no course in traffic psychology or any similar training focusing on the human factor in road traffic or the psychological aspects of road safety. The present course fills this gap by providing a systematic introduction to traffic psychology as a distinct interdisciplinary field. It integrates knowledge and approaches from psychology, the behavioural and social sciences, public health, and contemporary systems-based models of road safety. Its focus on psychological factors related to perception, attention, decision-making,

personality, emotions, risk-taking behaviour, social norms, and safety culture makes the course novel in both subject matter and content. The course is suitable not only for doctoral students in psychology but also for those in the social, transport, engineering, and health sciences whose research interests are related to the human factor and road safety.
Multimedia equipment is required for the delivery of the course.