

**COURSE DATA****DATA SUBJECT**

Code: 33347
Name: Psychology and road traffic security
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1319 - Degree in Psychology	Facultat de Psicologia i Logopèdia	4	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1319 - Degree in Psychology	Psychology and road traffic safety	ELECTIVES

COORDINATION

ALONSO PLA FRANCISCO M

SUMMARY

This course provides an overview of the broad field of action of psychologists and other professionals in the field of traffic, mobility, transport and road safety. It aims to provide information on the different areas and specialities within this field, both in relation to the training and knowledge acquired throughout the degree programme and in relation to the social environment in which they will develop professionally, seeking to provide a practical, useful and applied perspective on the most relevant aspects for intervention. This will enable students to acquire knowledge, particularly in relation to the so-called "human factor", which has been studied and recognised as the differentiating element for action in the field of traffic management, transport, mobility and, fundamentally, accident prevention, given that traffic accidents have become one of the most serious and numerous public health problems, including those that occur in the workplace (known as accidents while commuting and on duty), which have the common denominator that in most cases they are preventable.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS



COMPETENCES / LEARNING OUTCOMES

1319 - Degree in Psychology

Be able to define objectives and draw up plans that, from a human factor perspective, help to improve road safety and to prevent accidents.

Be able to identify the social, group and individual problems and needs in the field of traffic and road safety.

Be able to use strategies and techniques that can involve road users in the creation of a better and safer road system.

Get to know all the variables that affect (especially from the human factor) road safety and traffic risk.

Know and analyse the needs of the different sectors and groups in the field of road safety.

Know the different fields of application of Psychology to road safety and acquire the knowledge needed to contribute to improving road safety and especially to preventing traffic accidents.

DESCRIPTION OF CONTENTS

1. INTRODUCTION TO THE FIELD OF TRAFFIC, MOBILITY, TRANSPORT, AND ROAD SAFETY, ALONG WITH KEY RELATED CONCEPTS AND ASSOCIATED ISSUES.

An overview of the concepts of Traffic, Mobility, Transport and Road Safety, as well as all related concepts, such as Sustainable Mobility, Mobility as a Service (MaaS), Intelligent Transport Systems (ITS), etc.

Likewise, the main associated problems that are being addressed, such as road accidents, pollution, congestion, etc., are also discussed.

History of road safety and the application of psychology to this field.

2. THE PROBLEM OF ROAD SAFETY: EPIDEMIOLOGY OF ACCIDENTS, CAUSES AND RISK GROUPS.

Statistical data on traffic accidents, delving into the causes that provoke them, originating from human factors, roads and vehicles, as well as the interaction between all of them.

Risk groups are described in particular. Study of the characteristics that make each of these groups and collectives vulnerable users, such as children, the elderly, pedestrians, cyclists, motorcyclists, etc.

Description of vehicles (active and passive safety) and ergonomics, as well as environmental factors, roads and their condition, including their components, and in particular signage. Accident hotspots and dangerous locations will also be discussed.



3. PSYCHOLOGY OF ROAD USERS AND EXPLANATORY MODELS OF DRIVER BEHAVIOUR.

The relationship between psychological constructs (emotional states, aggressiveness, social behaviour, etc.) and, in particular, the role of basic psychological processes in driving (attention, perception, learning, thinking, decision-making, motivation, emotions, etc.) is explained.

Specifically, it explains the different explanatory models of driver behaviour (mechanistic/skills and propositional/cognitive-motivational), which can be extrapolated to any road user.

It describes the process of human-machine interaction, road and regulations.

In particular, it presents everything related to the regulatory framework and consequences of compliance/non-compliance (reinforcement and punishment) based on learning principles.

4. RISK FACTORS IN TRAFFIC: SLEEP, FATIGUE, DISTRACTIONS, ALCOHOL, SPEED, PSYCHOLOGICAL DISORDERS, DRUGS, ETC.

Detailed analysis and study of each of the risk factors related to road accidents. Specifically, the following will be addressed:

- Driving while sleepy
- The effects of fatigue
- Distractions
- The influence of alcohol on accidents
- Speed and its relationship to traffic accidents
- Psychological disorders in traffic
- Drug abuse and driving
- Illnesses and medications in traffic

5. INTERVENTION STRATEGIES: MEASURES, COUNTERMEASURES, AND PLANS.

Review of the different areas of intervention in the field of traffic, mobility, transport and road safety.

Psychology applied to road safety prevention: strategies that can be developed from psychology for the prevention of traffic accidents.

Different intervention measures will be discussed, and how to incorporate them into the necessary strategic plans will be shown.

The fields of education and training (including companies for the prevention of accidents while travelling to and from work and on business trips) will be considered from the point of view of clinical psychology, advertising, marketing, etc.

Other related measures and plans will also be presented, such as those related to improving sustainable mobility and transport, including those with a technological basis.

**WORKLOAD****PRESENCIAL ACTIVITIES**

Activity	Hours
Theoretical and practical classes	45,00
Total hours	45,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	2,50
Individual or group project	35,00
Independent study and work	15,00
Preparation of lessons	0,00
Preparation for assessment activities	15,00
Resolution of case studies	0,00
Total hours	67,50

TEACHING METHODOLOGY

- Master Classes. These classes will be taught with significant audiovisual support, road safety manuals, scientific articles on the subjects, and other readings and materials related to the topic that may be useful in the student's training. The different contents of the subject will be developed, encouraging student participation.

- Active participation in class through group dynamics.

- Seminars, Workshops and Practical Sessions. These are specifically aimed at applied aspects so that students, either individually or in groups, can use the materials provided to acquire the ability to develop and apply their knowledge to the reality they will encounter in their professional activity, and so that they can acquire and consolidate all the skills proposed in the subject.

Specifically, in accordance with the teaching innovation projects, the following will be carried out:

1. Career paths and entrepreneurship in traffic, mobility, transport and road safety: visits to institutions and organisations in the traffic, mobility, transport and road safety sector to learn about the work they do and the possible roles of psychologists.
2. Career paths and entrepreneurship in traffic, mobility, transport and road safety II: Meetings with experts: Presentations by professionals from the sector to be held in the classroom.
3. Learning by doing and competing: Development of a Communication/Advertising Campaign as an exemplary intervention

- Scheduled individual or group tutorials for the supervision of practical work, guidance and resolution of doubts.

EVALUATION**ASSESSMENT SYSTEMS**



1. Assessment of theoretical and practical content through oral, written or skills performance tests.
2. Oral or written presentation of reports, individual or group work, clinical cases, problem solving and management of diagnostic tests.
3. Active participation in class activities, seminars and workshops and motivation for quality learning outcomes.

WEIGHTING

1. Assessment of theoretical and practical content through oral, written, or skills performance tests. (60%)
2. Active participation in classroom activities and group dynamics. (10%). Not recoverable in the second exam session given the nature of the activities.
3. Oral and/or written presentation of reports, individual and group work. (10%). Recoverable in the second exam session.
4. Participation in scheduled visits outside the classroom to institutions and organizations in the traffic, mobility, transportation, and road safety sectors, and presentation of work derived from these visits that which will take place mainly during class time (10%). Not recoverable in the second exam session given the nature of the activities.
5. Presentations by professionals in the classroom (10%). Not recoverable in the second exam session given the nature of the activities.

MINIMUM REQUIREMENTS

The minimum requirement to pass this course is to achieve a 50% pass mark in the exam (i.e. at least a score of 3 out of 6) and obtain a minimum final grade of 5.

WARNING

Copying or plagiarism of any part of the assessment will result in failure of the course and subsequent disciplinary proceedings.

Please note that, in accordance with Article 13. d) of the University Student Statute (RD 1791/2010, of 30 December), it is the duty of a student to refrain from using or cooperating in fraudulent procedures in assessment tests, in work carried out or in official university documents.

During tutorial hours, teachers may request individual or group interviews in order to verify the degree of participation and achievement of the objectives set for any task carried out. Failure to accept such verification will result in failure of the task or activity in question.

In the event of fraudulent practices, the procedures set out in the Protocol for dealing with fraudulent practices at the University of Valencia (ACGUV 123/2020) will be followed: <https://www.uv.es/sgeneral/Protocols/C83sp.pdf>



GRADING SYSTEM

The grading of the course will be subject to the provisions of the University of Valencia Grading Regulations (ACGUV 12/2004) (http://www.uv.es/graus/normatives/Reglament_qualificacions.pdf)

In accordance with these regulations, grades are expressed as a number between 0 and 10 with one decimal place, using the following grading scale:

- 0 to 4.9: fail.
- 5 to 6.9: pass.
- 7 to 8.9: good.
- 9 to 10: very good or very good with honours.

The different sections covered in the assessment will only be added together when the minimum requirement is exceeded (obtaining a minimum of 3 in the exam). In the event of a tie in the final grade with the option of honours (which will be considered from 9.5 onwards), and if the teaching staff decides to award it, a test will be carried out on the content taught in the subject.

The grade obtained in the first exam will be included in the course record in accordance with the following rules:

- If there is no grade in the section with the highest weighting, the grade will be NOT PRESENTED, regardless of the rest.
- If there is a grade in the section with the highest weighting, and it does not meet the minimum requirements, FAIL will be recorded and a numerical grade on a scale of 10 will be given for this section.
- If there is a grade in the section with the highest weighting, and this exceeds the minimum requirements, but these requirements are not met in any of the other sections, a FAIL will be recorded and a numerical grade on a scale of 10 will be given for the section in which the subject was not passed.

In the second exam session, the following rules will apply:

- The mark obtained in the continuous assessment, both in section 2 and in section 3, will be kept until the second exam session.
- If no mark has been obtained in section 2, due to the corresponding reports not having been completed, as these are considered RECOVERABLE, they may be resubmitted for the second exam session.

There are no differences in the minimum requirements for passing the course in either the first or second exam session.

Any queries or appeals regarding the grade obtained in assessment tasks will be subject to the provisions of the Regulations on Appealing Grades (ACGUV of 29 April 2008).

(<http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C9.pdf>)

REFERENCES

Basic References:

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Porter, B. E. (Ed) (2011). *Handbook of Traffic Psychology*. Ed. Elsevier. New York.

Supplementary References:

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Ministerio de Transportes, Movilidad y Agenda Urbana (2020). *Estrategia de Movilidad Segura, Sostenible y Conectada 2030*

Barjonet, P. (Ed) (2001): *Traffic Psychology Today*. Kluwer Academic Publishers. Boston/London