

**COURSE DATA****Data Subject**

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| Code | 33347 |
| Name | Psychology and road traffic security |
| Cycle | Grade |
| ECTS Credits | 4.5 |
| Academic year | 2023 - 2024 |

Study (s)

| Degree | Center | Acad. year | Period |
|-----------------------------|--|-------------------|---------------|
| 1319 - Degree in Psychology | Faculty of Psychology and Speech Therapy | 4 | Second term |

Subject-matter

| Degree | Subject-matter | Character |
|-----------------------------|---|------------------|
| 1319 - Degree in Psychology | 46 - Psychology and road traffic safety | Optional |

Coordination

| Name | Department |
|--------------------------|------------------------|
| ALONSO PLA, FRANCISCO M. | 300 - Basic Psychology |

SUMMARY

This subject presents an approach to the broad field of action of psychologists and other professionals in the field of traffic, mobility, transport and road safety. In this way, it covers the different areas and specialities of the aforementioned field, both in relation to the training and knowledge acquired throughout the degree, as well as in reference 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 allow students to acquire knowledge, especially with regard to "human factor", studied and recognised as the differential element for action within the framework 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 in itinere and on mission), the common denominator of which is that in most cases they are avoidable.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

OUTCOMES

1319 - Degree in Psychology

- 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.
- Get to know all the variables that affect (especially from the human factor) road safety and traffic risk.
- Be able to identify the social, group and individual problems and needs in the field of traffic and road safety.
- 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 use strategies and techniques that can involve road users in the creation of a better and safer road system.
- Know and analyse the needs of the different sectors and groups in the field of road safety.

LEARNING OUTCOMES

- Understand the main concepts related to traffic, mobility, transport and road safety.
- Recognise the problems associated with traffic, mobility, transport and road safety.
- Identify epidemiological sources, major intervening factors, causes of traffic accidents, as well as risk groups and vulnerable users.
- Describe the explanatory models of "driver behaviour" recognising the incidence of the principles of psychology and, in particular, basic psychological processes.
- Identify the main risk factors in relation to the human factor.
- Be able to access sources of information and relevant documentation on traffic, mobility, transport and road safety for the development of plans.
- Identify the areas of intervention and applications, from their specialisation, in the field of Mobility, Land Transport, Traffic and Road Safety, as well as professional opportunities and industrial and business initiatives.



DESCRIPTION OF CONTENTS

1. Introduction to the field of traffic, mobility, transport and road safety, as well as to the main related concepts and problems.

Approach 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. It also covers the main associated problems that we are trying to mitigate, such as road accidents, pollution, congestion, etc.

2. The problem of road safety: epidemiology of accidents, causes and risk groups.

Epidemiology of road traffic accidents, looking in-depth at the causes that provoke them, from the human factor, the roads and the vehicle, as well as the interaction of all of them.

In particular, the risk groups are described. The 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 especially signalling. It will also cover accident hot spots and black spots.

3. Psychology of road users and explanatory models of "driver behaviour".

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

In particular, the different explanatory models of "driver behaviour" (mechanistic/skills and propositional/cognitive/motivational/cognitive), which can be extrapolated to any road user, are explained.

In particular, everything related to the regulatory framework and consequences of compliance/non-compliance (reinforcement and punishment) will be presented on the basis of learning principles.

4. Risk factors in traffic: drowsiness, fatigue, distractions, alcohol, speed, psychological disorders, drugs, etc.

Analysis and detailed study of each risk factor related to road accidents. Specifically, it will work:

- Sleep and driving
- The effects of fatigue on drivers
- Distractions
- The influence of alcohol in road accidents
- Speeding and its relation to traffic accidents
- Psychological problems in traffic
- Abuse of drugs and driving
- Diseases and medical drugs in traffic

**5. Intervention strategies: measures, countermeasures and plans**

Review of the different areas of intervention in preventing road accidents and promoting road safety. Different intervention measures will be listed and shown how to set them up to create the necessary strategic plans.

The fields of education, and training (including the company for the prevention of accidents in the workplace and on mission), from the point of view of clinical psychology, advertising, marketing, etc., will be considered.

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

WORKLOAD

| ACTIVITY | Hours | % To be attended |
|--|---------------|------------------|
| Theoretical and practical classes | 45,00 | 100 |
| Attendance at events and external activities | 2,00 | 0 |
| Development of group work | 20,00 | 0 |
| Development of individual work | 10,00 | 0 |
| Study and independent work | 20,00 | 0 |
| Readings supplementary material | 1,50 | 0 |
| Preparation of evaluation activities | 10,00 | 0 |
| Preparing lectures | 2,00 | 0 |
| Preparation of practical classes and problem | 2,00 | 0 |
| TOTAL | 112,50 | |

TEACHING METHODOLOGY

Active and participative methodology which integrates various instructional methodologies in order to enhance meaningful learning of the knowledge involved and the development of related skills among students

The basic instructional techniques include: (1) Visits to institutions and organizations in the traffic, mobility, transport and road safety sector to learn about the work carried out there, as well as the possible performance of psychologists, (2) Exhibits and presentations of subject, (3) Practical activities (case studies, road safety campaigns design...), (4) Individual or group work, making of reports undertaken in the classroom (individual and group), (5) Tutoring and formative and summative evaluation.



EVALUATION

ASSESSMENT SYSTEMS

1. Assessment of theory and practical contents through oral, written or skills tests.
2. Written or oral presentation of reports, individual or group projects, clinical cases, resolution of problems, and handling diagnostic tests.
3. Active participation in classroom activities, seminars and workshops and motivation for quality learning outcomes.

WEIGHTING

1. Assessment of theory and practical contents through oral, written or skills tests (60%)
2. Written or oral presentation of reports, individual and group projects (20%). Recoverable on second call
3. Active participation in activities carried out outside the classroom, visits, seminars and/or workshops and motivation for quality in learning outcomes (20%). Not recoverable in the second call given the characteristics of the activities. The grade obtained in this assessment system will remain for the second call.

MINIMUM REQUIREMENTS

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

WARNING

Copying or plagiarism of any assignment in any part of the assessment will make it impossible to pass the course, and the student will be subject to the appropriate disciplinary procedures.

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

During tutorial hours, the teaching staff 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 mean failing the assignment or activity in question.

In the case of fraudulent practices, the procedure will be as determined by the Protocol of action in the case of fraudulent practices at the University of Valencia (ACGUV 123/2020):
<https://www.uv.es/sgeneral/Protocols/C83sp.pdf>



GRADING SYSTEM

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

In accordance with this, it will be expressed in numerical terms from 0 to 10 to one decimal place, using the following grading scale:

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

The different sections contemplated in the evaluation will only be added together when the minimum requirement established (obtaining a minimum of 3 in the exam) is exceeded.

In the event of a tie in the final grade with the option of an honours degree (which will be considered from 9,5), and if the teaching staff decides to award it, there will be a test to be determined on the contents taught in the subject.

The grade obtained in the first call will be included in the final grade of the course in accordance with the following rules:

- If there is no grade in the evaluation section with the highest weighting, the grade will be **NOT PRESENTED**, regardless of the rest.
- If there is a grade in the evaluation section with the highest weighting, and this does not meet the minimum requirements, the grade for this section will be **SUSPENDED** and a numerical mark in base 10.
- If there is a grade in the evaluation section with the highest weighting, and this exceeds the minimum requirements established, but these requirements are not reached in any of the remaining sections, a grade of **SUSPENSE** will be recorded and a numerical mark in base 10 of the grade of the section for which the student does not pass the subject.

In the second call, 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 sitting.

In the case of not having obtained a mark in section 2, due to not having completed the corresponding reports, given that they are considered **RECOVERABLE**, these may be handed in again for the second sitting.

In both the 1st and 2nd Call there are no differences in terms of the minimum requirements to pass the subject.



The consultation and challenge of the grade obtained in evaluation tasks, will be subject to the provisions of the Regulations for the Challenge of Grades (ACGUV of 29 April 2008).
(<http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C9.pdf>)

REFERENCES

Basic

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Additional

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- Alonso Plá, F. M., Esteban Martínez, C., Calatayud Miñana, C., Montoro González, L., & Alamar Rocatí, B. (2004). Los jóvenes en el tráfico: Circunstancias culturales, sociales y psicológicas. Cuadernos de Reflexión Attitudes.



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