

Psychosociology and Ergonomics

Code: 101831
ECTS Credits: 6

Degree	Type	Year	Semester
2502501 Prevention and Integral Safety and Security	OT	4	0

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

External teachers

Dr. Bernat Noël Tiffón

Prerequisites

This subject does not have any pre-requirement

Objectives and Contextualisation

- Know the key aspects for conducting studies of working conditions.
- Acquire the necessary knowledge for the design of jobs adapted to the person.
- Understand the ergonomic approach to physical factors: noise, lighting, environment chromatic, temperature, etc.
- Identify all preventive aspects related to work with visualization screens of data
- Understand the importance of the problems derived from the physical load and the establishment of adequate preventive measures.
- Know and know how to apply different methods of evaluating the postural load.
- Contribute to the improvement of the social and organizational aspects of the work with the objective of safeguard health and safety, with maximum comfort, satisfaction and effectiveness.
- Recognize and identify those psychosocial factors existing in the workplace, which can be cause diseases or decrease the capabilities of workers.
- Identify situations related to work stress and know the different strategies of the organization to face it.
- Adopt a critical perspective regarding a series of situations, which may lead to another series of psychosocial problems such as Burnout, work addiction, etc.
- Distinguish the problems arising from personal relationships at work and arrange the measures adequate to prevent it.
- Differentiate the key aspects that relate to the mental load.

Competences

- Assume the social, ethical and professional responsibility that derives from professional practice.

- Be able to adapt to unexpected situations.
- Carry out analyses of preventative measures in the area of security.
- Communicate information , ideas, problems and solutions to both specialised and non-specialised publics.
- Generate innovative and competitive proposals in research and in professional activity developing curiosity and creativity.
- Have a general understanding of basic knowledge in the area of prevention and integral safety and security.
- Identify, manage and resolve conflicts.
- Plan and coordinate the resources of the three large subsystems that interact in questions of security: people, technology and infrastructures.
- Respond to problems applying knowledge to practice.
- Use the capacity for analysis and synthesis to solve problems.
- Work in institutional and interprofessional networks.

Learning Outcomes

1. Apply systems of responsibility and management models particular to models of labour risk prevention management.
2. Assume the social, ethical and professional responsibility that derives from professional practice.
3. Be able to adapt to unexpected situations.
4. Coordinate the resources of the three main subsystems of the prevention and integral security sector: people, technology and infrastructures.
5. Generate innovative and competitive proposals in research and in professional activity developing curiosity and creativity.
6. Identify the most common labour risk factors.
7. Identify, manage and resolve conflicts.
8. Implement and evaluate a plan for labour risk prevention in an organisation.
9. Respond to problems applying knowledge to practice.
10. Use the capacity for analysis and synthesis to solve problems.
11. Work in institutional and interprofessional networks.

Content

Block I: Applied Psychosociology

Mental load at work. Analysis and evaluation

Psychosocial factors

Organizational structure of the work. I work shifts and night work.

Characteristics of the company, the position and individual

Stress and other psychosocial problems. The burnout syndrome. Mobbing

Consequences of harmful psychosocial factors and their evaluation

Psychosocial intervention: Methodology for evaluating occupational risk prevention programs with psychosocial components.

Block II: Ergonomics.

Ergonomics: Introduction. History. Relationship with other sciences. Concepts and classification. Techniques ergonomic

Environmental conditions in ergonomics. Acoustic comfort Visual comfort. Thermal comfort. Comfort chromatic. Analysis and evaluation

Conception and design of the job. Anthropometry applied to the design of work systems. Occupational biomechanics and job design

Physical workload. Analysis and evaluation. Manual handling of loads. Analysis and evaluation

Work positions. Analysis and evaluation. Repetitive movements. Analysis and evaluation. Evaluation of jobs. The ergonomic report.

Methodology

- The theoretical classes in the classroom, correspond to a master methodology in which the teacher will make a brief theoretical presentation of the subject matter of study.
- The practical classes will complement the theory given in the classroom and consist of developing exercises and individual or group work, in which the concepts explained in the theory part will be put into practice. Subsequently, a common set-up will be carried out, from which the corresponding academic conclusions will be shown.
- The autonomous activities outside the classroom will correspond to the individual study as well as the resolution of the exercises and works proposed by the teacher. These activities will be posted on Moodle for evaluation.
- The evaluation activities will serve to evaluate the knowledge and competences acquired by the students, according to the criteria presented in the following section.
- The tutorials with the teaching staff will be arranged by email

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Directed training activities	44	1.76	3, 1, 2, 4, 9, 5, 6, 7, 8, 11, 10
Type: Supervised			
Supervised training activities	12	0.48	3, 1, 2, 4, 9, 5, 6, 7, 8, 11, 10
Type: Autonomous			
Autonomous training activities	94	3.76	3, 1, 2, 4, 9, 5, 6, 7, 8, 11, 10

Assessment

Individual written test (there will be a global exam of the two subjects at the end of the subject)

The theoretical test will be on Block 1 and Block 2 and will count 60% of the grade of the subject (30% for each block to be passed with a minimum of 5 each). The test will consist of 60 multiple choice questions, both theoretical and practical. Each question will have a value of one point and will be subtracted 0.25 for each failed or unanswered question. If each part of the block is not passed the student will go to recovery of the suspended block.

Important: One who does not take one of the tests is equivalent to 0. In the event of a justified absence from the test, the teacher can be consulted in order to find an alternative form of assessment for that test.

Evaluation of individual works

During the course a series of individual exercises to be delivered will be proposed and they will score 40% in the final grade. These exercises will be presented during theoretical classes in the classroom and may be associated with different programmed readings and / or information searches.

Continuous evaluation

The continuous evaluation will only be taken into account if the theoretical tests have been passed - practices and 80% of the proposed activities have been carried out.

Final Exam - Recovery

Those students who score less than 5 points will have the option to apply to the final exam.

Students who do not pass the continuous assessment or who do not show up for it will have to present to the RECOVERY to overcome the subject. The maximum note of this exam will be 5-Approved

Not evaluable

A student will be considered as NOT EVALUABLE and therefore will need to be presented to the Recovery. Any student who has not presented all of the practical exercises or you have not completed any of the partial tests scheduled for the course.

Repeatable students

Repeating students will perform the same types of tests as the rest of the students. Both the theoretical-practical and the delivery of exercises.

In case of not passing the subject according to the aforementioned criteria (evaluation continued), a recovery test may be done on the scheduled date in the schedule, and that will cover the entire contents of the program.

To participate in the recovery the students must have been previously evaluated in a set of activities, the weight of which equals a minimum of two thirds of the the total grade of the subject. However, the qualification that will be included in the file of the

Student is a maximum of 5-Approved.

Students who need to change an evaluation date must submit the request filling in the document that you will find in the moodle space of Tutorial EPSI.

Without prejudice to other disciplinary measures deemed appropriate, and in accordance with the current academic regulations, "in case the student performs any irregularity that may lead to a significant variation in the rating of an evaluation act, will qualify with a 0 this act of evaluation, regardless of the disciplinary process that

I can instruct. In case of various irregularities occur in the evaluation acts of the same subject, the final grade of this subject will be 0 ". The tests / exams may be written and / or oral at the discretion of the teaching staff

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Ergonomics:Theoretical tests and individual practices	30%	0	0	3, 1, 2, 4, 9, 5, 6, 7, 8, 11, 10
Evaluation of the topics studied and presented in the classroom and of the activities programmed in the Moodle	40%	0	0	3, 1, 2, 4, 9, 5, 6, 7, 8, 11, 10
Psychosociology: Theoretical and practical tests	30%	0	0	3, 1, 2, 4, 9, 5, 6, 7, 8, 11, 10

Bibliography

Basic bibliography

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- Llorca J. L. ; Llorca L. ; Llorca M. (2015). Manual of ergonomics applied to the prevention of occupational risks. Madrid: Pyramid.
- Mondelo P. R. ; Gregori E. ; Barrau P. (2000). Ergonomics 1: Fundamentals. Barcelona: Edicions UPC.
- Mondelo P.R. ; Gregori E. ; Comas S. ; Castejon E. ; Bartolomé E. (2000). Ergonomics 2: Comfort and thermal stress. Barcelona: Edicions UPC.
- Mondelo P.R. ; Gregori E. ; Barrau P. ; Blasco J. (2000). Ergonomics 3: Design of a job. Barcelona: Edicions UPC.
- Mondelo P.R. ; Gregori E. ; From Pedro O. ; Gomez M.A. (2013). Ergonomics 4: Work in offices. Barcelona: Edicions UPC.
- García A. L. (2017). Ergonomics and psychosociology applied to the prevention of occupational risks. Oviedo: Oviedo University Editions.
- Gutiérrez J.L. ; Moreno B. ; Garrosa E. ; (2005). Mental load and work fatigue. Madrid: Pyramid.
- Meseguer M. ; Soler M. I. (2010). Work Psychology. Murcia: Ed. Diego Marín.
- Nogareda M. (2003). Psychosociology of work. Madrid: Ministry of Labor and Social Affairs.
- Salanova M. (2009). Psychology of occupational health. Madrid: Synthesis.

WEB links

- Generalitat of Catalunya. Departament d'Empresa i Ocupació. Seguretat i Salut Laboral.
- ILO: Encyclopedia of Health and Safety at Work. Available in electronic format at <http://empleo.mtas.es/insht/index.htm>
- ISTAS Portal. Trade Union Institute of Environment and Health. <http://www.istas.net/web/portada.asp>
- Moncada, S., Llorens, C. and Kristensen, T. (2004). ISTAS21 method (CoPsoQ). Manual for the assessment of psychosocial risks at work. Madrid. Istas. Available at: http://www.istas.ccoo.es/descargas/m_metodo_istas21.pdf
- Ergonomics in Spanish. : <http://www.ergonomia.cl/eee/Inicio/Inicio.html>
- Government of La Rioja. Occupational Health Publications
- Navarro Institute of Occupational Health
- National Institute for Safety and Hygiene at Work. Portal of Ergonomics and Psychosociology
- European Foundation for Working Conditions
- Statistics about work. Eurostat
- Basque Institute of Occupational Health and Safety. OSALAN