Universitat Autònoma de Barcelona

2019/2020

Psychosociology and Ergonomics

Code: 101831
ECTS Credits: 6

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

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 Moddle 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

The first theoretical test will be on Block 1 and will count 30% of the grade of the subject.

The test will consist of 30 multiple-choice questions, both theoretical and practical. Each question will have a value of one point and 0.25 will be subtracted for each question failure or no answer.

The second theoretical test will be on Block 2 and will count 30% of the grade of the subject.

The test will consist of 30 multiple-choice questions, both theoretical and practical. Each question will have a value of one point and 0.25 will be subtracted for each question failure or no answer.

One not presented to one of the tests is equal to 0. In case of absence justified to the test, you can talk to the teacher to find an alternative way of evaluation 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 testsscheduled 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. Availableat: 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