

Sectorial Risk Models

Code: 101865
ECTS Credits: 6

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Degree	Type	Year
Prevention and Integral Safety and Security	OB	2

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Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

There are no pre-requisites

Objectives and Contextualisation

In recent years, there has been a widespread concern in many sectors to generate a culture of leadership and job security in society and in companies themselves. The ultimate goal is that all actors have a clear vision of how they should deal with prevention management and what tools they have at their disposal. In this way, it is expected to propitiate a greater integration of prevention in daily practice and thus achieve better leadership, control of risks and possible criminal, civil, labor and administrative responsibilities derived therefrom.

The risk is "understood as the possibility of obtaining a certain undesired result and a possible damage to a specific action derived from the work". Therefore, it is logical to expect that there are different types of risks, depending on the nature of the professional activity that is carried out.

For this reason, the objective of this course is to contextualise the concept of risk within the specialty of Security, Ergonomics, Psychosociology and Industrial Hygiene, from a technical and legal-expert point of view with practical examples of each specialty and business sector. In this way, it is intended to give the student different tools to identify the occupational risks associated with certain sectors. In addition, the legal regulations that frame risk management at national and international level will be discussed.

The training objectives of the subject are the following:

Acquire, manage and deepen the concepts of leadership and risk of the specialty of security, ergonomic risk, psychosocial risk and hygiene risk and their respective models of a sectoral nature from a technical and

legal-expert perspective.

Develop the reasoning and critical analysis of the student that allows him to evaluate the risks according to the sector.

Analyze and efficiently adapt risk analysis strategies using risk models according to the corresponding sector. Design lines of leadership, action and action that allow the planning of strategies for the prevention of risks within the workplace.

Develop and apply the knowledge and skills acquired in the theory and practices to specific real cases.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Carry out analyses of preventative measures in the area of security.
- Identify the resources necessary to respond to management needs for prevention and integral security.
- Know how to communicate and transmit ideas and result efficiently in a professional and non-expert environment, both orally and in writing.
- Make efficient use of ITC in the communication and transmission of results.
- 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.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.
- Use the capacity for analysis and synthesis to solve problems.
- Work and learn autonomously.
- Work in institutional and interprofessional networks.

Learning Outcomes

1. Analyse the preventative interventions in matters of security, environment, quality and social corporate responsibility and identify the inherent risk factors.
2. Analyse the sex- or gender-based inequalities and the gender biases present in one's own area of knowledge.
3. Coordinate the resources of the three main subsystems of the prevention and integral security sector: people, technology and infrastructures.
4. Critically analyse the principles, values and procedures that govern professional practice.
5. Identify, develop or acquire and maintain the main resources necessary to respond to tactical and operational needs inherent in the prevention and security sector.
6. Know how to communicate and transmit ideas and result efficiently in a professional and non-expert environment, both orally and in writing.
7. Make efficient use of ITC in the communication and transmission of results.
8. Respond to problems applying knowledge to practice.
9. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.

10. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
11. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
12. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
13. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
14. Take a preventative view in the area of security.
15. Use the capacity for analysis and synthesis to solve problems.
16. Work and learn autonomously.
17. Work in institutional and interprofessional networks.

Content

1. Risk sectors and fundamentals of the techniques for improving working conditions and prevention of occupational risks. Concepts, objectives. Sectors. Risk sectors. PRL regulations. Risks, damage from work, prevention and protection. Sources of risk General risks of safety, ergonomics / psychosociology and industrial hygiene.

2. Job security: Concepts, objectives and basic regulations. Characteristics, effects, evaluation and control. Workplaces. Jobs Work teams Deficiencies and safety risk factors. Occupational safety is the discipline that has as its main objective the prevention of occupational accidents in which there is direct contact between the material agent, be it a work team, a product, a substance or an energy, and the worker , with consequences usually, but not exclusively, traumatic.

3: Ergonomics: Concepts, objectives and basic regulations. Ergonomic studies Ergonomics seeks to adapt the job position to the characteristics, limitations and needs of the workers to improve their safety and health. This section offers recommendations for work with data display screens, lighting criteria, ergonomic criteria, as well as ergonomic information for workers.

4: Psycho-sociology: Concepts, objectives and basic norms. Legal and forensic psychosociology. Human emotions and their effect on work and in labor relations. Physical and psychological harm at work. Psycho-sociology has as its main objective to analyze the characteristics of the working conditions that come from its organization and that affect the health of the workers

5: Industrial Hygiene: Physical Agents. Features, effects, evaluation and control: noise, vibration, thermal environment, non-ionizing radiation, ionizing radiation. Health surveillance. Chemical agents Occupational toxicology, exposure assessment, exposure control: general principles; actions on the polluting focus; actions on the propagation medium. Ventilation: actions on the individual: personal protection equipment: classification. Specific legal regulations: The Seveso Directive, hazardous chemicals, safety sheets and REACH, storage of chemical and petroleum products (Signaling), transport of dangerous substances (ADR). Biological agents. Industrial hygiene Concepts, objectives and basic regulations. Biological agents: Characteristics, effects, evaluation and control. Hygienic studies

Modern organizations are increasingly needed, LIDERS, security technicians, competent, global and integral. For this reason, from this course we will prepare the students so that, whatever their current or future profession, their origin, their previous training and the final itinerary they choose, they will be able to give a professional, related answer with the integral security, to the companies that contract their services to them.

According to figures from the International Labor Organization (ILO), every 15 seconds, 160 working people suffer an accident while working for someone else's, and one of them. These figures mean that 6,300 people die each day, more than 2.3 million deaths per year due to accidents or illnesses related to work. Annually, more than 317 million accidents at work occur, many of these accidents, derived from physical and

psychological risks, leave important consequences for staff that increase labor absenteeism figures. The cost of this daily adversity is enormous and the economic burden of bad health and safety practices in business organizations is estimated at 4% of the global Gross Domestic Product (GDP) each year.

Globalization of the markets has significantly complicated business decision-making, as well as making it difficult to implement effective preventive policies that reduce the physical and psychological wear of personnel in this environment of continuous changes.

Constant and thorough research and comprehensive work on the concept of risk, within the specialties of Security, Ergonomics, Psychosociology and Industrial Hygiene, will make the student be able, from a technical and legal perspective, to identify and defend, not just before a businessman or Inspector of Labor, but before a Court of Justice, any technical report related to the occupational risks associated with the different business sectors.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Evaluation	4	0.16	
Master Classes	40	1.6	
Type: Supervised			
Tutorials to support the realization of practical and theoretical work	12	0.48	
Type: Autonomous			
Personal study, reading articles and preparing class work	94	3.76	

The classes will be given in CATALAN LANGUAGE

Classes in the classroom correspond to a master methodology in which, during the first hour, the teacher will explain the theory of the subject studied, the rest will correspond to the practical sessions where the students will work individually or in groups, discussing about the concepts dealt with in the session, reflective materials and solving specific cases.

The contents worked on the theoretical sessions will be evaluated through evaluable written tests.

The contents worked on the practical sessions will also be evaluated by delivering the work done (in the classroom or via Moodle according to the case). The practical classes in the classroom will consist of the development of exercises and individual or group work, applying in practice some of the concepts dealt with in the theoretical classes. These tasks can be individual reflections, group exercises, case presentations, etc.

The development, the study, the compulsory and recommended bibliographical reading, as well as the resolution of exercises outside the classroom will also occupy a significant part

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continuous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Individual test FINAL: Written written test	50%	0	0	4, 2, 14, 6, 3, 8, 1, 7, 5, 13, 12, 11, 9, 10, 17, 16, 15
Work mandatory reading	50%	0	0	4, 2, 14, 6, 3, 8, 1, 7, 5, 13, 12, 11, 9, 10, 17, 16, 15

The students will carry out an evaluation by means of a face-to-face written test or virtual (MOODLE) on the subject that will take place on the scheduled date at the School. This test may be oral at the discretion of the teacher.

The students will have to do two tasks regarding the compulsory reading contemplated in the bibliography section of the subject.

Each of these three evaluated sections must be passed with a minimum grade of 5.

Single Evaluation

Students who opt for the single assessment will take a final synthesis test of all the subject content (50%) and hand in the subject work (50%)

The date for this test and the delivery of the subject work will be the same scheduled in the schedule for the last continuous assessment exam.

The same recovery system as for the continuous evaluation will be applied.

Re-evaluation The minimum grade to be able to access the subject is 3.5 (in the final exam)

In case of not passing the subject according to the aforementioned criteria (continuous evaluation), a recovery test may be done on the date scheduled in the schedule, and it 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 total grade of the subject. However, the qualification that will consist of the student's file is a maximum of 5-Approved.

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

Plagiarism

Without prejudice to other disciplinary measures deemed appropriate, and in accordance with current academic regulations, "in the event that the student makes any irregularity that could lead to a significant variation in the grade of an evaluation act, it will be graded with a 0. This evaluation act, regardless of the disciplinary process that can be instructed. 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.

If during the correction there are indications that an activity or work has been carried out with answers assisted by artificial intelligence, the teacher may complement the activity with a personal interview to corroborate the authorship of the text.

For this subject, the use of Artificial Intelligence (AI) technologies is permitted exclusively for support tasks, such as bibliographic or information searches, proofreading, or translations. Students must clearly identify which sections were generated with this technology, specify the tools used, and include a critical reflection on how these influenced the process and final outcome of the activity. Lack of transparency in the use of AI in this

assessable activity will be considered academic dishonesty and may result in a partial or total penalty in the activity grade, or greater sanctions in serious cases.

Students that retake the course

Regarding those students who have to retake the course, it should be emphasized that the assessment methodology is the same as for other students.

Due to unforeseen circumstances that prevent the normal development of the subject, the teaching staff may modify both the methodology and the evaluation system of the subject.

Bibliography

Mandatory Bibliography

BOOK: LIDERANDO EL BIENESTAR LABORAL: ORDEN O CAOS

Autor: Dr Miquel Àngel Serrat

Edition: 2021

Editorial BOSCH EDITOR

Recomended Bibliography

- Ley 31/1995, de 8 de noviembre, de prevención de riesgos laborales. BOE núm. 269, de 10 de noviembre de 1995.
- LEY 54/2003, de 12 de diciembre, de reforma del marco normativo de la prevención de riesgos laborales.
- Real Decreto 39/1997, de 17 de enero, por el que se aprueba el Reglamento de los Servicios de Prevención. BOE núm. 27, de 31 de enero de 1997.
- Rd 171/2004
- Otras Leyes y RD relacionados con la Seguridad, Higiene, Ergonomía y Psicosociología
- Diferentes notas técnicas de prevención (NTP) y normas UNE

Software

This subject will use the basic software of the Office 365 package

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
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(TE) Theory	1	Catalan	second semester	afternoon
(TE) Theory	2	Catalan	second semester	afternoon