

## Sectorial Risk Models

Code: 104008  
ECTS Credits: 6

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Degree	Type	Year
Prevention and Integral Safety and Security	OB	2

### Contact

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### Teaching groups languages

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

### Prerequisites

This subject does not have any prerequierments

### Objectives and Contextualisation

- Acquire, handle and deepen the concept of 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 action and action that allow the planning of strategies for the prevention of risks in 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

### Didactic Unit 1

#### INTRODUCTION TO SECTORAL RISK MODELS

##### 1. Introduction

##### 1.1 Economic sectors and associated accidents.

##### 1.2 The regulation in Prevention of Labor Risks

##### 1.3 The importance of the technical regulations in the identification and evaluation of risk (ISO, EN, UNE, ...) and the criteria of the INSSBT (Technical Guides and Technical Notes of Prevention)

##### 1.4. Private sector guides and protocols.

##### 1.5. Specific sectorial demands for risk assessments

### Didactic Unit 2

#### RISK ASSESSMENT MODELS APPLICABLE TO SECTORS

2.1. Modelo general de evaluación de los riesgos laborales  
 2.1 The Prevention Plan  
 2.2. The General Risk Assessment (EGR)  
 2.2. Structuring of the methods of risk assessment  
 2.2.1. Simplified methods of risk assessment  
 2.2.2. Complex methods of risk assessment. (And its link to Industrial Safety)  
 2.2.3 Complex methods of assessment of specific occupational risks: Industrial Hygiene, Ergonomics and Applied Psychosociology  
 Didactic Unit 3  
 PRIMARY OR AGRICULTURAL SECTOR  
 3.1 Mining  
 3.2 Fishing  
 3.3. Agriculture  
 3.4. The livestock  
 Didactic Unit 4  
 SECTOR OR INDUSTRIAL SECTOR  
 4.1. The construction  
 4.2. The chemical industry  
 4.3. The steel and metallurgical industry  
 4.4. The manufacturing industry  
 4.4 The food industry  
 4.5. The graphic arts  
 4.6. The textile industry (and footwear)  
 Didactic Unit 5  
 TERTIARY SECTOR OR SERVICES  
 5.1. The hotel industry and tourism  
 5.2. The trade  
 5.3. Administration and offices  
 5.4. The cleaning  
 5.5. Teaching  
 5.5. Other risks of the services sector, transport, ...  
 Enviar comentarios  
 Historial  
 Guardadas  
 Comunidad

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Classes with TIC support and Evaluation	16	0.64	4, 2, 14, 6, 3, 8, 1, 7, 5, 13, 12, 11, 9, 10, 17, 16, 15
Type: Supervised			
Tutorials to support practical and theoretical work (Webex sessions and forums). Resolution of doubts. Follow-up of the exercises; Attention in the Moodle Classroom	24	0.96	2, 6, 8, 7, 17, 16, 15
Type: Autonomous			
Resolution of practical cases. Realization of works. Personal study	110	4.4	4, 2, 14, 6, 3, 8,

Teaching language: Spanish

Bearing in mind that the modality of this teaching is remote (online), the teaching methodology will be composed of the following set of activities:

Availability on the web (classroom Moodle) of the training units that contain the basic content of the subject to work.

Develop in the subject.

These units in pdf., Contain links to documents (of free access) that can be consulted in the network and that provide additional information to the student about the content of the subject.

Follow-up with ICT support

Video Classes programmed in the calendar.

Continuous Evaluation Tests (PEC's) - 3 PAC's

Test of written evaluation that will take place in person at the School On the date marked on the calendar of the second semester.

Participation of the student in debates in the forums, on the basis of cases or problems presented, in which he / she can apply the knowledge acquired throughout the development of the subject.

The platform of the Moodle Classroom of the UAB will be used for regular contact with students, review of notes, presentation and delivery of continuous assessment works

The tutorials with the teaching staff will be arranged by email

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
Presential written test of Continuous Evaluation	50%	0	0	6, 8, 7, 13, 12, 11, 9, 10, 17, 16, 15
Specific work, preferably in a group, that develops a specific aspect of the contents of the units.	20%	0	0	4, 2, 14, 6, 3, 8, 1, 7, 5, 13, 12, 11, 9, 10, 17, 16, 15
Theoretical Continuous Evaluation Tests-individual practices	30%	0	0	4, 2, 14, 6, 3, 8, 1, 7, 5, 13, 12, 11, 9, 10, 17, 16, 15

#### Continuous Assessment

Students will take three continuous evaluation tests (PEC) that will be submitted through the Moodle classroom.

Students will take a final evaluation by means of a written test on the subject matter on the date marked in the calendar of the second semester.

In order to pass the course through continuous evaluation, the average of the PEC and the Continuous Evaluation Written Test must be 5 points.

In case of not delivering any of the PEC, or not participating in the forums, the continuous evaluation will be considered as not evaluable.

Single evaluation

The students who opt for the single evaluation will take a final synthesis test of all the content of the course (50%) and will deliver and/or be evaluated of the PECs of the course (50%).

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

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

Evaluation of the students in second or more summons

Students repeating the course must take the scheduled tests and exams and hand in the course work on the dates indicated in the Moodle classroom.

Recovery Exam

In case of not passing the course according to the above mentioned criteria (continuous assessment), a recovery test may be taken on the date scheduled in the timetable, which will deal with all the contents of the program.

In order to participate in the recovery the student must have been previously evaluated in a set of activities, the weight of which is equivalent to a minimum of two thirds of the total grade of the subject. However, the grade that will be recorded in the student's file is a maximum of 5-Approved.

Changing the date of a test or exam

Students who need to change an evaluation date must submit the request by filling out the document that can be found in the EPSI Tutoring Moodle space.

Once the document has been filled in, it must be sent to the subject teacher and to the Grade Coordination.

Revision

At the time of each evaluation activity, the faculty will inform the students of the grade review mechanisms.

For single evaluation students, the review process will be the same.

Consult the EPSI Evaluation Regulations.

Other considerations - Plagiarism

Without prejudice to other disciplinary measures deemed appropriate, and in accordance with current academic regulations, "in the event that the student performs any irregularity that may lead to a significant variation in the grade of an act of evaluation, this act of evaluation will be graded with a 0, regardless of the disciplinary process that may be instigated. in the event that several irregularities occur in the acts of evaluation of the same subject, the final grade of this subject will be 0".

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

If there are unforeseen circumstances that prevent the normal development of the course, the teacher may modify both the methodology and the evaluation of the course.

Use of IA

In this subject, the use of Artificial Intelligence (AI) technologies is allowed as an integral part of the development of the work, provided that the result reflects a significant contribution of the student in the analysis and personal reflection. The student must clearly identify which parts have been generated with this technology, specify the tools used and include a critical reflection on how these have influenced the process and the result of the activity. The lack of transparency in the use of AI will be considered a lack of academic honesty and may lead to a penalty in the grade of the activity, greater sanctions in cases of seriousness.

## Bibliography

ALONSO GARCÍA, Ángel. (1988) *Conceptos de organización industrial*. 1ª Edición. Marcombo. Barcelona

CALATAYUD SARTHOU, A. et al. *Evaluación y control de los riesgos laborales*. (2006) Tirant lo Blanch, Valencia

CARRILLO DONAIRE, Juan A. (2000) *Derecho de la Calidad y de la Seguridad Industrial*. Marcial Pons

CORTÉS, J. M. (2000) *Técnicas de prevención de riesgos laborales*. Ed. Tébar Flores, Madrid

COBO SÁNCHEZ, D. (2004) *Introducción a la prevención de riesgos laborales*. ISTAS, Madrid.

DURÁN, F. (2001). *Informe sobre riesgos laborales y su prevención. La seguridad y salud en el trabajo en España*. Estudio para la elaboración de un informe sobre riesgos laborales y su prevención. Presidencia de Gobierno, Madrid

FERNANDEZ MARCOS, L. (2000) El ámbito natural de la evaluación de riesgos en la normativa preventiva. *Aranzadi Social*, pág. 631-646

GARCÍA NINET, J.L. (Dir.). (2005) *Manual de prevención de riesgos laborales (Seguridad, Higiene y salud en el trabajo)*, Atelier, Barcelona

MELIÁ NAVARRO, José Luis. (2007) *El factor humano en la seguridad laboral*. Lettera, Bilbao

MÉTAYER, Y; HIRSCH, L. (2007). *Primeros pasos en la gestión de riesgos*. AENOR, Madrid

MOLES PLAZA, Ramón Jordi. Derecho y calidad. El régimen jurídico de la normalización técnica. (2001) Ariel Derecho

MUÑOZ RUIZ; Ana Belén. (2009) *El sistema normativo de prevención de riesgos laborales*, Lex Nova, Valladolid

OIT. Proyecto de directrices técnicas de la OIT sobre sistemas de gestión de la seguridad y salud en el trabajo, Ginebra, 2001

OIT. Trabajo sin riesgo y cultura de la seguridad. *Informe de la OIT presentado con ocasión del Día Mundial sobre la Seguridad y la Salud en el Trabajo 2004*

OIT. La prevención: una estrategia global. *Informe de la OIT para el Día mundial sobre la seguridad y la salud en el trabajo 2005*. Ginebra, 2005

RUBIO ROMERO, J.C. (2004) *Métodos de evaluación de riesgos laborales*. Diaz de Santos, Madrid, 2004

SALA FRANCO, Tomás. *Derecho de la prevención de riesgos laborales*. 3ªEd. Tirant lo Blanch, Valencia, 2007

TARRÉS VIVES, Marc. *Normas técnicas y ordenamiento jurídico*. Valencia, Tirant lo Blanch, Valencia, 2003

## 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
(TE) Theory	1	Spanish	second semester	afternoon