

Hygiene and Health

Code: 101833
ECTS Credits: 6

Degree	Type	Year	Semester
2502501 Prevention and Integral Safety and Security	OT	4	1

Contact

Name: Mercedes Hernández Galera

Email: mercedes.hernandez@uab.cat

Teaching groups languages

To check the language/s of instruction, you must click on "Methodology" section of the course guide.

Prerequisites

This subject has no pre-requirerements

Objectives and Contextualisation

The general training objectives of the subject are:

- Understand the key aspects to assess the working conditions from the physical, chemical and biological perspective of the working environment.
- Assess the main risks to the person of the physical, chemical and biological contaminants.
- Know how to design sampling strategies for hygiene studies.
- Know how to interpret the results of the measures of the physical, chemical and biological contaminants.
- Identify the necessary preventative aspects to protect the person from the physical, chemical and biological contaminants.
- Acquire the knowledge necessary for the design of jobs adapted to the person and free of contaminants.
- Understand the main functions of work medicine.
- Know the main techniques of work medicine.
- Acquire the basic knowledge to understand occupational epidemiology.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Be able to adapt to unexpected situations.

- 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.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- 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 account of social, economic and environmental impacts when operating within one's own area of knowledge.
- 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 in institutional and interprofessional networks.

Learning Outcomes

1. Analyse the situation and identify the points that are best.
2. Apply systems of responsibility and management models particular to models of labour risk prevention management.
3. Be able to adapt to unexpected situations.
4. Critically analyse the principles, values and procedures that govern professional practice.
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. Propose new methods or well-founded alternative solutions.
9. Propose projects and actions that incorporate the gender perspective.
10. Propose viable projects and actions that promote social, economic and environmental benefits.
11. Respond to problems applying knowledge to practice.
12. 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.
13. 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.
14. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
15. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
16. 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.
17. Use the capacity for analysis and synthesis to solve problems.
18. Work in institutional and interprofessional networks.

Content

Block 1 - Work hygiene

Work hygiene Concepts and objectives.

Chemical agents Occupational toxicology.

Chemical agents Evaluation of the exhibition.

Chemical agents Control of the exhibition: general principles; actions on the polluting focus; actions on the propagation medium. Ventilation; actions on the person: personal protection equipment.

Specific legal regulations.

Physical agents: characteristics, effects, evaluation and control: noise, vibrations, thermal environment, non-ionizing radiation, ionizing radiation.

Biological agents. Effects, evaluation and control.

Block 2 - Work medicine

Basic concepts, objectives and functions.

Pathologies of work origin.

Surveillance of health.

Promotion of health in the company.

Epidemiología laboral y investigación epidemiológica.

Health planning and information.

First aid

Methodology

Teaching language: spanish.

The theoretical classes in the classroom, correspond to a master methodology in which the teacher will make a theoretical presentation of the subject matter of study most of the time.

The practical classes in the classroom will consist of developing exercises and assignments, in which some of the concepts explained in the theoretical classes will be put into practice. Subsequent sharing will be carried out, from which the corresponding academic conclusions were drawn.

The autonomous activities correspond to the individual study as well as the resolution of the exercises and works proposed by the teacher. You can also propose to the student to do a research work on a subject related to the subject matter of study, which in some cases you can ask for their exposure to the group.

The evaluation activities will serve to evaluate the knowledge and competences acquired by the students.

Tutorials with the faculty 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.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Evaluation	4	0.16	

Lessons	40	1.6
Type: Supervised		
Continuos assessment	12	0.48
Type: Autonomous		
Personal study	94	3.76

Assessment

CONTINUOUS EVALUATION

There will be three individual PECs corresponding to the subjects studied in the subject. The PECs will have a weight of 50% of the final grade of the subject.

The remaining 50% corresponds to the theoretical exam.

The exam averages with the continuous evaluation regardless of the grade obtained whenever a minimum of 3.5 points is obtained.

The total weighted average must be 5 points or higher in order to pass.

SINGLE EVALUATION

Students who opt for the single assessment will take a final synthesis test of all the content of the subject (50%) and hand in a document that will contain the solutions to the PECs of the subject (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.

EVALUATION OF THE STUDENTS IN SECOND OR MORE SUMMONS

Students who repeat the course will have to take the scheduled tests and exams and hand in the course work on the dates indicated in the Moodle classroom.

SECOND CHANCE EXAMINATION

The student who does not pass the course, who does not reach 5 (total) out of 10, according to the criteria established in the two previous sections may take a final exam provided that the student has been evaluated in a set of activities, the weight of which is equivalent to a minimum of two thirds of the total grade of the course. If the student has not been evaluated of these two thirds because he/she has not taken the tests, he/she will obtain a grade of Not Presented, without the possibility of taking the final exam.

In this exam the whole of the contents of the subject that have not been passed in the continuous evaluation will be re-evaluated.

In the case of passing the final exam, the course will be approved with a maximum of 5, regardless of the grade obtained in the exam.

CHANGE OF DATE OF A TEST OR EXAMINATION

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 professor of the subject and to the coordination of the Degree.

REVIEW

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.

OTHER CONSIDERATIONS

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.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Delivery of work	50%	0	0	3, 4, 1, 2, 11, 5, 6, 7, 8, 9, 10, 16, 15, 14, 12, 13, 18, 17
Theoretical test	50%	0	0	3, 4, 1, 2, 11, 5, 6, 7, 8, 9, 10, 16, 15, 12, 13, 17

Bibliography

- UNE-EN 689:2019. Exposición en el lugar de trabajo. Medición de la exposición por inhalación de agentes químicos. Estrategia para verificar la conformidad con los valores límite de exposición profesional.
- Bazan, X (2014). Higiene industrial. Barcelona: editorial UOC.
- Fernández, J. (2013). Vigilancia de la salud de los trabajadores. Madrid: Eolas Editores.
- Henao, F. (2010). Riesgo Químico. Madrid: Starbook Editorial.
- López, A. (2011). Radioprotección en centros sanitarios. Madrid: CEP.
- López, R. (2006). Riesgos químicos en el trabajo: guía jurídica. Madrid: Bomarzo.
- Mateo, P. (2009). Gestión de la higiene industrial en la empresa. Madrid: Fundación Confemetal.
- Menendez, F. (2012). Higiene Industrial. Manual para la formación del especialista. Valladolid: Lex Nova.
- Rubio, J. C. (2005) Manual para la formación de nivel superior en prevención de riesgos laborales. Barcelona: Diaz Santos.
- Ruix-Frutos c, García AM, Delcl's J, Benavides FG. (2007) Salud laboral, conceptos y técnicas para la prevención de riesgos laborales. Barcelona. Ed. Masson.

Software

The subject will use the basic software of the Office 365 package.