68907 - Speciality in industrial hygiene

Información del Plan Docente

Academic Year	2016/17
Academic center	102 - Facultad de Derecho
Degree	462 - Master's in Occupational Health and Safety
ECTS	10.0
Course	1
Period	Second semester
Subject Type	Optional
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

The learning process that is designed for this subject is based on the following:
The subject has a practical guidance, so that the proposed activities are focused on understanding and assimilation of knowledge and skills necessary for professional performance of an industrial hygienist, addressing the student to acquire the " know to do".
For this reason, the overview of the knowledge acquired in lectures participatory, is complemented by practical classes where the student must know the practical application of the knowledge acquired. seminars, where students learn to work together, explain and defend the work that they develop also arises.
To complement the classroom training visits to facilities in which to know the result of the application of the concepts learned will be made.

68907 - Speciality in industrial hygiene

To better track the learning process will encourage students to use the tutorials through various systems and methods: conventional tutorials, more specific tutorials related to practical work-type seminar.

5.2.Learning activities

The program that the student is offered to help you achieve the expected results includes the following activities ...
1. Conferences
Presentation of the agenda items through lectures illustrated with examples applied.
2. Case Studies.
Case studies are intended to place the students to practice solving the problems of risk management related to industrial hygiene, from detection risk through evaluation of it to end in eliminating or controlling risk hygienic. Specifically three types of practical cases to be resolved related to chemical, physical and biological agents pose. The statements of case studies will be provided by teachers or by e-mail or deposited in reprographics.
3. Case tutored
Students will have to make a case tutored by teachers on a proposed statement by teachers. This case is equivalent to 3 ECTS time (75 hours) student work. The resolution of the case must be presented as the deadline on June 13, 2013, and will be evaluated by 40% of the total assessable activities.
The evaluation will take into account specificity in the responses, knowledge of matter and the correct interpretation of the law and applicable regulations.
4. Seminars.
several seminars that deal monographically proposed some specific issues.
5. Visits to industrial facilities.
They try to give a true picture of the risks and preventive measures implemented in a work environment.

5.3.Program

Class	Content
Master Class	Introduction to Specialty. Specific legislation on Industrial Hygiene, case study.
Master Class	Advanced Occupational Toxicology. Biologic control.
Master Class	Chemical reactivity. ecotoxicological properties.
Master Class	Detection of chemical contaminants in Industrial Hygiene..
Master Class	Sampling of chemical contaminants, measuring strategy, measuring equipment. Exposure assessment of carcinogenic, mutagenic, toxic for reproduction and sensitizers.
Master Class	Control of chemical contaminants by

68907 - Speciality in industrial hygiene

		General ventilation
	Master Class	Control of chemical contaminants local exhaust
	Seminar	PPE selection of respiratory protection against chemical agents, chemical suit and gloves. Practical cases.
	Master Class	Noise measurement methodology and measurement equipment..
	Master Class	Measurement and evaluation of vibration exposure.
	Seminar	Lighting.
	Master Class	Selection of personal protective equipment against noise
	Master Class	Noise control measures.
	Master Class	Ionizing radiation. Non-ionizing radiation.
	Master Class	thermal environment.
	Seminar	Specific risks in the manufacture of metal products. Practical applications Assessment Physical agents Noise and Vibrations.
Seminar		Specific risks in beef, pork, sheep farming. poultry farms. Specific risks in hospitals and healthcare facilities Practical applications of biological agents evaluation in these sectors.
Seminar		Specific risks in Madera Specific risks in Graphic Arts: exposure to inks and solvents Practical applications of identification, assessment and control of chemical

68907 - Speciality in industrial hygiene

	agents
Master Class	Biological agents. Non-pathogenic bioaerosols.
Seminar	Presentation and delivery of case study. Exam

Faculty:
The responsibility and the provision of teaching correspond to various professionals and specialists in the areas of Industrial Hygiene, with extensive experience in Industrial Hygiene and teaching. Among the professionals he has had professors and University professors, specialists and technicians with outstanding and proven knowledge in prevention from the ISSLA, Services Occupational Health and Safety and Work Accident Mutuals.
Professor and coordinator of the course:
D. Miguel Olmos Llorente. Technician in Occupational Risk Prevention. Master's Degree in Occupational Health and Safety at the University of Salamanca. Director of the Society for Prevention Fremap in Zaragoza. Professor own title "Master of Occupational Health and Safety" of the University of Zaragoza.
Other teachers of the subject:
Dra. Celia Domeño Recalde. Professor of Analytical Chemistry at the University of Zaragoza. Two master collaborator at the University of Zaragoza, Master in Environmental Engineering and Master of Occupational Health and Safety, and the Graduate Water Resources.
D. Rafael Garcia Foncillas. Licensed in medicine. Primary attention doctor. Associate Professor responsible for occupational health in the Degree of Industrial Relations and Human Resources at the University of Zaragoza.
Dr. Fernando Marzo Uceda. Technician in Occupational Risk Prevention. Medical Labour Cabinet and Safety of Zaragoza. ISSLA. Vice President of the Society Medicine, Hygiene and Safety of Aragon and La Rioja (SMHSTAR).
Dra. Cristina Nerín de la Puerta. University Professor and Director of LEAD, Dpt. Analytical Chemistry, EINA, University of Zaragoza group
D. Eugenio Paredes Palomo. Technician in Occupational Risk Prevention. Master's Degree in Occupational Health and Safety at the University of Salamanca. Aragon Regional Coordinator Area Industrial Hygiene Society Fremap Prevention. Professor own title "Master of Occupational Health and Safety" of the University of Zaragoza.
D. Pedro Perez Polo. Technician in Occupational Risk Prevention. Aragon Regional Coordinator of Occupational Health and Safety Prevention Mutual Fremap. Professor own title "Master of Occupational Health and Safety" of the University of Zaragoza.
D. Joaquín Ramo Maicas. Technician in Occupational Risk Prevention. Provincial Chief of Aragon Institute of Occupational Safety and Health (ISSLA) in Teruel. Professor own title "Master of Occupational Health and Safety" of the University of Zaragoza.

5.4.Planning and scheduling

Schedule sessions and presentation of works
Planning for the course:
The course consists of 10 ECTS credits distributed as follows .
Lectures 2.8 ECTS
Seminars / workshops 1.0 ECTS
Presentation of work and examination 0.2 ECTS
Tutoring 2.0 ECTS
Student work 3,0 ECTS

68907 - Speciality in industrial hygiene

Company visits 1.0 ECTS credits
Schedule sessions and presentation of works
The final schedule will be published on the website of the Faculty of Law
http://derecho.unizar.es/ well in advance.

5.5.Bibliography and recomended resources

Al estudiante durante la realización de las clases prácticas se le indicará una bibliografía de carácter básico para cada tema así como una relación de sitios web en los que poder consultar documentación e información.

El material, apuntes y casos prácticos que vaya a ser utilizado serán proporcionados por el profesorado o por medios electrónicos o depositados en reprografía.