

POLI ESCOLA SUPERIOR TECNOLOGIA GESTÃO TÉCNICO GUARDA	SUBJECT DESCRIPTION	MODELO PED.013.03
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Course	Mechanical and Industrial Informatics					
Subject	Industrial Safety					
Academic year	2023/2024	Curricular year	3rd	Study period	1st semester	
Type of subject	Compulsory	Student workload (H)	Total: 108	Contact: 45	ECTS	4
Professor(s)	PhD Jorge Gregório					
<input checked="" type="checkbox"/> Area/Group Coordinator <input type="checkbox"/> Head of Department		PhD Reinas André				

PLANNED SUBJECT DESCRIPTION

1. LEARNING OBJECTIVES

The syllabus allows the student to understand the concepts related to industrial occupational health and safety, including Legislation and standards on Safety. Particularly students should:

- (C1) Acquire skills to identify, assess and prevent hazards in industrial environments.
- (C2) Identify and prevent major contaminants.
- (C3) Acquire skills in the prevention of occupational diseases and occupational accidents.
- (C4) Acquire skills related to Legislation and standards on Safety in industrial environment.
- (C5) Acquire skills related to Occupational Ergonomics in industry.

2. PROGRAMME

1. Introduction of occupational safety and health.
2. Risk management.
3. Risks related to electrical energy, chemical contaminants and radiation.
4. Personal protective equipment.
5. Occupational diseases, Hygiene and Safety fundamentals in workshops and preventive actions in industry.
6. Occupational Ergonomics in the industrial environment.

3. COHERENCE BETWEEN PROGRAMME AND OBJECTIVES

Intended learning outcomes C1 – syllabus contents in 2 and 3.

Intended learning outcomes C2 – syllabus contents in 3.

Intended learning outcomes C3 – syllabus contents from 2 to 6.

Intended learning outcomes C4 – syllabus contents from 3 to 6.

Intended learning outcomes C5 – syllabus contents in 6.

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4. MAIN BIBLIOGRAPHY

Mandatory

- [1] Miguel, A.S.; Manual de Higiene e Segurança do Trabalho. 13ª ed. Porto Editora, 2014. ISBN: 978-972-0-01896-0.
- [2] Freitas Luís Conceição; (2016); Manual de Segurança e Saúde do Trabalho, 3ª edição, Edições Sílabo. ISBN: 978-972-618-866-7.
- [3] Cabral, Fernando.; (2011), Segurança e Saúde do Trabalho, Manual de Prevenção de Riscos Profissionais, 5ª Edição, Verlag Dashofer. ISBN: 978-989-642-137-3
- [4] Itiro, I; Ergonomia projeto e produção, Edgard Blucher, 2005. ISBN: 85-212-3054-3
- [5] Fonseca, A. et al.; Conceção de Locais de Trabalho: Guia de Apoio, Série Informação Técnica -4ª edição, IDICT, 2006. ISBN: 972-8321-90-2
- [6] ISO 11228-3:2007 - Ergonomics -- Manual handling -- Part 3: Handling of low loads at high frequency, 2007.
- [7] Gregório, Jorge; (2022) Resenha legislativa de Segurança e Saúde no Trabalho, IPG.

Recommended

- [8] Brauer, R. L.; Safety and Health for Engineers. 3rd Edition, John Wiley & Sons, Inc., 2016. ISBN: 978-1-119-21918-7
- [9] EU-OSH -European Agency for Safety and Health at Work; Analysis of the determinants of workplace occupational safety and health practice in a selection of EU Member States, 2013. ISBN: 9789292400675
- [10] Roxo, Manuel M.; (2009), Segurança e Saúde do Trabalho: Avaliação e controlo de riscos 2ª Edição, Editora Almedina. Coimbra. ISBN: 978-972-40-2273-4
- [11] NP ISO 45001:2019; Sistemas de gestão da segurança e saúde no trabalho – Requisitos e orientações para a sua utilização, Instituto Português da Qualidade (IPQ).

5. TEACHING METHODOLOGIES (INCLUDING EVALUATION)

Teaching methodologies

The contents are presented using theoretical-practical lessons (TP).

The contents are presented through lectures, using the whiteboard, audiovisual media some demonstrations and study visits.

Student evaluation

Ongoing assessment (minimum grade – 10/20): written test (50%), practical work (50%).

Exam assessment (minimum grade – 10/20): written test.

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6. COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES

The oral presentation of the contents, using the whiteboard, audiovisual media, practical examples, some demonstrations and study visits ensures that students achieve the intended learning outcomes.

7. ATTENDANCE

Students must be present in all classes to make the course more interactive and interesting.

8. CONTACTS AND OFFICE HOURS

Contacts of the coordinator of the subject area and the professor of the course

Coordinator of the subject area

Name: PhD Reinas André

Email: jandre@ipg.pt

Telephone: 271 220 120 – ext: 1213

Office nº13

Professor of the course

Name: PhD Jorge Gregório

Email: jgregorio@ipg.pt

Telephone: 271 220 120 – ext:1205

Telephone: 963 000 921

Office nº5

Attendance hours: Monday: 15:00 to 16:30.

9. OTHERS

Other than attendance, students must be punctual in classes and avoid unnecessary interruptions.

DATE: 11 de setembro de 2023

SIGNATURES

Professor(s), Area/Group Coordinator or Head of Department signatures

Area/Group Coordinator

(PhD Reinas André)

Professor

(PhD Jorge Gregório)