

ID	3258
Curricular Unit	Occupational Health and Safety I
Regent	Rui Miguel Bettencourt Melo
Learning Outcomes	Students should: - demonstrate an understanding of the importance of occupational health and safety (OHS) principles and practice in the prevention of workplace accidents and diseases; - acquire practical knowledge of the OHS laws and standards; - identify and use the basic concepts of OHS in risk management; - identify the factors that contribute to electrical, explosion and fire risks, and propose and evaluate control strategies.
Syllabus	Occupational Health and Safety (OHS) fundamentals National and European regulations on OHS Organization of OHS activities within the enterprises Workplace accident causes Workplace accident statistics Safety signals Personal protective equipment Fire safety Electrical safety
Evaluation	The presentation and discussion of the theoretical aspects of the syllabus relies on PowerPoint presentations and videos. Practical classes involve the resolution of specific problems concerning most syllabus issues and sometimes real life situations. Students are expected to complete an essay assignment (30% weighting), within the scope of the syllabus, present it in class and take 2 written tests (70% weighting). Alternatively, a final exam is also available.
Bibliography	AVEN, T. (2008), Risk Analysis - Assessing Uncertainties Beyond Expected Values and Probabilities, West Sussex: John Wiley & Sons. BRAUER, R.L. (2006), Safety and Health for Engineers, 2nd edition, New Jersey: John Wiley & Sons. FERREIRA DE CASTRO, C.; ABRANTES, J.B. (2009), Manual de Segurança contra Incêndio em Edifícios, 2ª edição, Sintra: Escola Nacional de Bombeiros. HARMS-RINGDAHL, L. (2013), Guide to safety analysis for accident prevention, Stockholm: IRS Riskhantering AB. MIGUEL, A.S.S.R. (2012), Manual de Higiene e Segurança do Trabalho, 12ª. Edição, Porto: Porto Editora. MIGUEL, M.; SILVANO, P. (2009), Regulamento de Segurança em Tabelas, Lisboa,: Ed. Autor. TAYLOR, G., EASTER, K. and HEGNEY, R. (2004), Enhancing Occupational Safety and Health, Oxford: Elsevier Butterworth-Heinemann.