

ID	3672
Curricular Unit	Occupational Health and Safety II
Regent	Rui Miguel Bettencourt Melo
Learning Outcomes	<p>Upon completion of the course, students are expected to be able to:</p> <ul style="list-style-type: none"> - identify physical and chemical hazards; - devise monitoring strategies to assess exposure to physical and chemical hazards; - acquire ability to carry out monitoring and measurement of physical and chemical hazards; - understand and apply the principles of the hierarchy of control to the selection of control measures for physical and chemical hazards.
Syllabus	<p>Human-environment interaction Vibrations Noise Radiations Lighting Thermal environment Chemical hazards</p>
Evaluation	<p>The presentation and discussion of the theoretical aspects of the syllabus relies on PowerPoint presentations and videos. It is followed by the practical approach of each issue, which comprises the resolution of a set of exercises previously selected from the bibliographic references. Whenever adequate, students are introduced to exposure measuring and monitoring procedures and equipments.</p> <p>Students are expected to complete a review of a research report and critically analyse it (30% weighting), within the scope of the environmental hazards covered by the syllabus, present it in class and take 2 written tests (70% weighting). Alternatively, a final exam is also available.</p>
Bibliography	<p>BOYCE; P.R. (2003), Human Factors in Lighting, 2nd edition, London: Taylor & Francis.</p> <p>BRAUER, R.L. (2006), Safety and Health for Engineers, 2nd edition, New Jersey: John Wiley & Sons.</p> <p>MACEDO, R. (2006), Manual de Higiene do Trabalho na Indústria, 3ª edição, Lisboa: Fundação Calouste Gulbenkian.</p> <p>MANSFIELD, N.J. (2005), Human Response to Vibration, CRC Press, Boca Raton.</p> <p>MIGUEL, A.S.S.R. (2012), Manual de Higiene e Segurança do Trabalho, 12ª. Edição, Porto: Porto Editora.</p> <p>PARSONS, K. C. (2003), Human Thermal Environments: the effects of hot, moderate and cold environments on human health, comfort and performance, 2nd edition, London: Taylor & Francis.</p>