

Doc. 300.1.2

Date: 5 July 2024

## Higher Education Institution's Response

- **Higher Education Institution:**  
European University Cyprus

- **Town:** Nicosia

- **Programme of study**  
**Name (Duration, ECTS, Cycle)**

**In Greek:**

Επαγγελματική Ασφάλεια και Υγεία (18 Μήνες, 90 ECTS, Μεταπτυχιακό)-Εξ Αποστάσεως

**In English:**

Occupational Safety and Health (18 Months, 90 ECTS, Master of Science) – E-Learning

- **Language(s) of instruction:** English and Greek

- **Programme's status:** New

- **Concentrations (if any):**

**In Greek:** Concentrations

**In English:** Concentrations



**The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the “Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws” of 2015 to 2021 [L.136(I)/2015 – L.132(I)/2021].**

## A. Guidelines on content and structure of the report

- *The Higher Education Institution (HEI) based on the External Evaluation Committee's (EEC's) evaluation report (Doc.300.1.1 or 300.1.1/1 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4) must justify whether actions have been taken in improving the quality of the programme of study in each assessment area. The answers' documentation should be brief and accurate and supported by the relevant documentation. Referral to annexes should be made only when necessary.*
- *In particular, under each assessment area and by using the 2<sup>nd</sup> column of each table, the HEI must respond on the following:*
  - *the areas of improvement and recommendations of the EEC*
  - *the conclusions and final remarks noted by the EEC*
- *The institution should respond to the EEC comments, in the designated area next each comment. The comments of the EEC should be copied from the EEC report **without any interference** in the content.*
- *In case of annexes, those should be attached and sent on separate document(s). Each document should be in \*.pdf format and named as annex1, annex2, etc.*

**1. Study programme and study programme’s design and development**  
(ESG 1.1, 1.2, 1.7, 1.8, 1.9)

Areas of improvement and recommendations <b>by EEC</b>	Actions Taken by the Institution	For Official Use ONLY
Reduce uptake from two to one yearly uptake to secure progression during the three semesters.	EUC has a policy of two intakes per year, at the beginning of the Fall and Spring Semester. We will ensure that students are integrated in the M.Sc. in the most pedagogically sound manner. To facilitate integration of new students and help them with their progression, “basic” modules OSA600 and OSA610 will be offered in both semesters. This is evident in <b>Annex 3 Table 2.</b>	Choose level of compliance:
Develop course content and assignments to progress towards a higher level with each course drawing on the preceding course.	We thank the EEC for the useful recommendation. We have therefore redesigned course content to reflect the importance of the 2 Basic Courses that constitute the basis for the rest (OSA 600 Introduction to Safety Management and Legislation & OSA 610 Risk Assessment and Management). Both courses are now prerequisites for the rest of the courses. <b>Annex 1 - Course Syllabi.</b> (changes have been highlighted in yellow)	Choose level of compliance:
Secure that all courses meet the master level of course content and assignments.	<b>Annex 1 – Course Syllabi,</b> reflects the answer to this EEC useful recommendation. Syllabi have now been revised according to Blooms Taxonomy; Learning Objectives are Master Level. In addition, we have included examples of 2 assignments which demonstrate the	Choose level of compliance:

	<p>importance of critical thinking in <b>Annex 2 – Course Assignment Examples.</b></p>	
<p>Change the present thesis option to a short thesis project of 15-20 ETCS, which is compulsory for all. The elective course version should not be possible. The new shorter thesis should aim at solving a real-life problem, argue analytically for the solution and a provide management report, but not expect a scientific level with providing new knowledge.</p>	<p>Thank you for this useful recommendation. <b>Annex 1 – Course Syllabi</b> illustrates the new form of delivery of the Research Component of the Course (page 13). In Semester 2, students will now be provided with a course in Research (with a more practical methodology) of 5 ECTS, at the same time students are enrolled in the compulsory Master Thesis course (15 ECTS) which is redesigned to provide a more practical aim. To enhance the practicality of the course, students are encouraged to undertake work related projects and to use measurement tools from the EUC safety lab if needed. In addition to that, they are encouraged to involve a practitioner as an external (second) supervisor of their project.</p> <p>Please also find in <b>Annex 4 – Structure of the Program of Study</b> the new structure of the programme demonstrating the semester breakdown based on these changes.</p>	<p>Choose level of compliance:</p>
<p>Reduce the "Research Methods" course to 5 ECTS and revise the content to be more practically oriented for OSH professionals, including methods such as realist evaluation, participatory approach, intervention evaluations, and observations.</p>	<p>Please see previous comment and <b>Annex 4 – Structure of the Program of Study</b> for more information.</p>	<p>Choose level of compliance:</p>

<p>The reduced credits for thesis and "Research Methods" will provide an additional 10–20 ECTS for more courses including topics such as health and well-being, management and organisation, sustainability and emerging risks.</p>	<p>We thank the EEC for this recommendation as well. In implementing this recommendation, the M.Sc. now will be offered in a new way with the master thesis as a compulsory course (15 ECTS), as described in previous comments. <b>Annex 4 – Structure of the Program of Study</b> presents the way the M.Sc. will be offered per semester. It is noticeable that a new course (Occupational Health and Wellbeing) is now added with an emphasis on health aspects of OHS, Process and Chemical Safety focuses on the issues pertinent to the Oil &amp; Gas and Chemical industry, Project Management includes new elements on Sustainability and Introduction to Safety Management and Legislation includes new elements on Emerging Risks on OHS.</p>	
<p>Integrate horizontally topics or activities that develop the soft skills of individuals such as communication, teamwork, facilitation, and other interpersonal skills which are crucial for OSH professionals for managing health and safety in dynamic and complex work environments.</p>	<p>Thank you for your recommendation. In implementing this, now all student activities (self-graded exercises, individual coursework, group coursework, interactive exercises) include actions that promote teamwork, interpersonal skills and enhance their soft skills (e.g. communication skills, presentation skills). This is evident in all study guides.</p>	

## 2. Student – centred learning, teaching and assessment (ESG 1.3)

Areas of improvement and recommendations <b>by EEC</b>	Actions Taken by the Institution	For Official Use ONLY
<p>Develop assignments that require higher-order cognitive skills of students such as applying, analysing, evaluating and creating skills.</p>	<p>Thank you for your recommendation. In implementing this change, analytical, evaluation and critical thinking skills have been taken onboard, examples of 2 such exercises are presented at <b>Annex 2 – Course Assignment Examples.</b></p>	<p>Choose level of compliance:</p>
<p>Prepare elaborated e-learning methods and materials before the program starts including student interaction, involvement, and feedback as well as progression, also secure practical elements from real workplaces.</p>	<p>Thank you for your comment.</p> <p>(a) With regards to preparation of e-learning methods beforehand, kindly refer to <b>Annex 5 - EUC E-Learning Programs of Study: Educational Principles, Teaching Philosophy and Methodology.</b> As you may see in this document, European University Cyprus provides a holistic, fully structured methodology for setting up and maintaining e-learning activities.</p> <p>(b) With regards to enhancing student involvement, it has been decided that an induction course will take place a week prior to the start of the semester. Activities will include a clear presentation of the opportunities for team work provided by Blackboard, fundamentals of the course and a course presentation, at least 2 presentations by practitioners (safety managers, policy makers from the competent authority, alumni of the course employed in the health and safety</p>	<p>Choose level of compliance:</p>

	sector). During the orientation sessions for new students, emphasis will be placed on the importance of understanding the Study Guides and Student Handbook, providing guidance on how to effectively plan their studies based on the information provided.	
Prepare e-learning methods beforehand to create a student community and engage students continuously in their learning process.	Thank you for your recommendation. During the induction week and throughout the semesters, forums will be opened on the platform of the programme Blackboard Learn Ultra to promote discussion and interaction between the students in all courses.	Choose level of compliance:
Create a closer link to practice in students' professional practice or for students not in a job – then in other companies, identified themselves or assisted by teachers – both as part of their thesis project and during their courses.	Thank you for your comment. This will be addressed with the introduction of more practical aspects in the Research Methods and the Master Thesis courses, including the potential involvement of a practitioner as second (external) supervisor. This way, students with no previous experience in the domain can acquire professional and practical skills.	Choose level of compliance:



### 3. Teaching staff (ESG 1.5)

Areas of improvement and recommendations <b>by EEC</b>	Actions Taken by the Institution	For Official Use ONLY
<p>The teaching staff appears too much constrained and focused, which could lead to faculty overload, vulnerability and cases where a single lecturer is responsible for several compulsory courses. Furthermore, the need to include additional topics in the program could create coverage problems. It is advisable to consider hiring additional faculty members or integrating other teaching staff (from within and outside the university, also taking advantage of PhD students and professionals) into the program.</p>	<p>Thank you for your comment. All teaching staff in the course follow their contractual obligations and do not teach additional courses that could affect their workload. As a matter of fact, based on the EUC Research Policy, the 3 Faculty Members teaching on the course, teach only 2 courses per week (6 teaching hours) as they have obtained Teaching Hours Reduction, stemming from their research performance. Irrespective of the above, if the need arises the University follows standard procedures to recruit additional full time or part time academic staff. In addition, the Ph.D. in OSH has already had 9 graduates of high caliber and CERIDES – Excellence in Innovation and Technology (the EUC research center) employes junior and senior researchers that can – potentially – create a pool of applicants.</p>	<p>Choose level of compliance:</p>

#### 4. Student admission, progression, recognition and certification (ESG 1.4)

Areas of improvement and recommendations <b>by EEC</b>	Actions Taken by the Institution	For Official Use ONLY
<p>The involved personnel may consider an introduction basic course for the students who have no prior knowledge of or experience with OSH.</p>	<p>Thank you for your comment. Please refer to the previous comment on the introduction of a one-week induction course as well as the comment on enhancement of professional practice (please see section 2, point 4 on page 6).</p>	<p>Choose level of compliance:</p>

## 5. Learning resources and student support (ESG 1.6)

Areas of improvement and recommendations <b>by EEC</b>	Actions Taken by the Institution	For Official Use ONLY
<p>Develop a method to secure student interactions. A possibility could be for students to form a group following each other all throughout the programme.</p>	<p>Thank you for your recommendation. As discussed in more detail in previous sections, Student Forums will be created for all courses. In addition to this all courses include group assignments. As stated, before an induction week will be organized before the beginning of the semester. In addition to that, “synchronous activities” will also be included, in order to provide real-time interaction with each other and the instructor.</p>	<p>Choose level of compliance:</p>

**6. Additional for doctoral programmes**  
 (ALL ESG)

N/A

Areas of improvement and recommendations <b>by EEC</b>	Actions Taken by the Institution	For Official Use ONLY
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## 7. Eligibility (Joint programme) (ALL ESG)

N/A

Areas of improvement and recommendations <b>by EEC</b>	Actions Taken by the Institution	For Official Use ONLY
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## B. Conclusions and final remarks

Conclusions and final remarks by <b>EEC</b>	Actions Taken by the Institution	For Official Use ONLY
<p>The Master in Occupational Safety and Health is a new educational e-learning programme with the aim to provide qualified OSH professionals at a master level in line with the needs of the contemporary and future labour market.</p> <p>The programme is designed involving relevant stakeholders, both on the side of regulatory authorities and on the side of companies and builds on extensive experience from the running on-stage OSH master programme. The present proposed programme is expected to replace the present on-site programme. The programme committee demonstrated a high commitment, documented competences and research experience on the topics addressed by the programme.</p>	<p>Thank you for your comment, indeed the program is the outcome of teamwork and engagement with the relevant stakeholders.</p>	<p>Choose level of compliance:</p>
<p>The university has established a policy for quality assurance. The program committee and the teaching staff demonstrate a high commitment, documented competences and research experience on the topics addressed by the program.</p>	<p>Thank you for your comment.</p>	<p>Choose level of compliance:</p>
<p>Teaching methods and assessment of students are adequate and meet international standards. Teaching staff is highly competent, although being limited in number. Services provided to students and facilities are adequate to support the learning process.</p>	<p>Thank you for your comment</p>	<p>Choose level of compliance:</p>
<p>It is the opinion of the committee that the programme deserves to be accredited provided that the following reservations are solved. These reservations concern that</p>	<p>Thank you for your comment, we have tried to answer your questions in this document.</p>	<p>Choose level of compliance:</p>



the programme is yet not fully developed for e-learning, and the progression and level of teaching need to be secured.		
Click or tap here to enter text.	Click or tap here to enter text.	Choose level of compliance:

### C. Higher Education Institution academic representatives

<i>Name</i>	<i>Position</i>	<i>Signature</i>
<b>Prof. George Boustras</b>	Program Coordinator	
<b>Dr. Ioannis Michos</b>	Chairperson, Department of Computer Science and Engineering	
<b>Prof. Panagiotis Papageorgis</b>	Dean, School of Sciences	

**Date:** 5.7.2024





SYLLABI

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Course Title	Introduction to Safety Management & OSH Legislation				
Course Code	OSA600				
Course Type	Compulsory				
Level	Master (2nd Cycle)				
Year / Semester	1st Year/ 1st semester				
Teacher's Name	Dr Cleo Varianou Mikellidou				
ECTS	10	Lectures / week	Up to 6 Teleconferences	Laboratories / week	None
Course Purpose and Objectives	<p>The objective of the <b>Introduction to Safety Management &amp; OSH Legislation</b> is to introduce students to the basics of health &amp; safety management, as well as provide them with an in-depth understanding of the legal background in OSH <b>and emerging risks</b>. A thorough presentation of the national and EU legislation will be given, together with a clear exposition of the essential contribution of safety &amp; health management to an organization's corporate risk management and governance obligations to its various stakeholders. <b>Emerging risks will be presented in order to raise awareness and preparedness on real workplaces challenges</b>. Students will master the legal, policy, financial, organizational and strategic aspects of health and safety legislation and will be introduced to the main national and international policymaking bodies. The importance of applying a holistic, organizational-wide safety management system and plan will be based on an understanding of the importance of risk assessment for determining and directing risk reduction and control measures. Finally, students will be expected to understand the importance of establishing a positive safety culture and the key variables and processes in achieving one.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Explore in depth the legal foundations of OSH in a Global (ILO), European (EU-OSHA) and National (DLI) level</li> <li>• Identify the philosophy behind the legal background in OSH and highlight the social circumstances (e.g. industrial revolution) that led to its development and adoption</li> <li>• Based on National and EU relevant legislation, develop health and safety policies and strategies</li> <li>• Design and implement an occupational health and safety plan at the organization level, taking into account the results of a relevant risk evaluation <b>and adapt them based on the new emerging risks</b>.</li> </ul>				

	<ul style="list-style-type: none"> <li>• Design and implement a health and safety management system, taking in account the organization's business and production processes, its employees, visitors, contractors and sub-contractors as well as others who may be affected by the organization's activities e.g. product safety/liability, safety of structures and buildings for end users and the public</li> <li>• Establish the necessary and appropriate monitoring, auditing, incident reporting, investigation and analysis mechanisms for safeguarding health and safety</li> <li>• Draw lessons and inferences from Safety Science history</li> <li>• Discuss in depth safety science theories and identify their relationship with required practice</li> <li>• Identify and discuss the importance of safety metaphors</li> <li>• Promote a positive safety culture at individual, group, organizational and inter-organizational levels and challenge attitudes and behaviours which are dangerous for health and safety.</li> <li>• Present and analyse the new emergind risk</li> </ul>		
Prerequisites	None	Co-requisites	None
Course Content	<p><b>Introduction to Safety Management &amp; OSH Legislation</b> will provide students with all the necessary information and techniques surrounding the design and implementation of a risk-based, tailor-made safety management system (SMS). Legal and organizational issues will be put into context and the importance of feedback mechanisms and risk communication strategies will be illustrated and applied. Safety culture will be explained in detail; risk assessment and control implementation techniques will be imparted and analysed critically in relation to their appropriate application.</p> <p>Topics that will be discussed:</p> <ul style="list-style-type: none"> <li>• Cyprus H&amp;S legislation (Οι περί Ασφάλειας και Υγείας στην Εργασία Νόμοι του 1996 – 2015)</li> <li>• EU H&amp;S Legislation e.g. Directive 89/391 Health &amp; Safety Framework, Directive 82/501 Major Hazards (Seveso I) and Directive 96/82 Major Hazards (Seveso II)</li> <li>• Relative benefits and effectiveness of (a) self-regulatory goal- directed H&amp;S legislation and enforcement and (b) prescriptive compliance orientated legislation and enforcement</li> <li>• H&amp;S Institutions (global, EU and national)</li> <li>• Role and contribution of H&amp;S management to Enterprise Risk Management and Corporate Governance</li> </ul>		

	<ul style="list-style-type: none"> <li>• Design of H&amp;S management systems and relevance of standards such as ISO45001</li> <li>• Planning and organization of a H&amp;S management system</li> <li>• H&amp;S risk reduction and control options, with practical examples</li> <li>• Internal monitoring and audit and review mechanisms for H&amp;S, including incident reporting, investigation and feedback to risk assessment and training.</li> <li>• The link between risk assessment and safety decision-making in the SMS</li> <li>• Risk communication</li> <li>• Safety Culture</li> <li>• Leadership</li> <li>• Influencing safety culture (e.g. leadership, standards, H&amp;S KPIs etc)</li> <li>• Human error and accident causation</li> <li>• High Reliability Organizations (HRO's)</li> <li>• Resilience</li> <li>• <b>New emerging risks</b></li> </ul>						
Teaching Methodology	E-Learning						
Bibliography	<p><b>Required Readings:</b> George Boustras, Frank W. Guldenmund <i>Safety Management in Small and Medium Sized Enterprises (SMEs) (The Interface of Safety and Security)</i> Latest Edition, CRC Press, ISBN-10: 1498744729,</p> <p><b>Recommended Readings:</b> A.C. Neal <i>European Communities' Health and Safety Legislation</i> Latest Edition, Routledge, ISBN-10: 1138430951</p> <p><i>Safety Science</i>, Elsevier, ISSN: 0925-7535</p>						
Assessment	<table border="1"> <tr> <td>Final Examination</td> <td>50%</td> </tr> <tr> <td>Assignments/On-going evaluation</td> <td>50%</td> </tr> <tr> <td></td> <td>100%</td> </tr> </table>	Final Examination	50%	Assignments/On-going evaluation	50%		100%
Final Examination	50%						
Assignments/On-going evaluation	50%						
	100%						
Language	English						

Course Title	Risk Assessment & Management				
Course Code	OSA605				
Course Type	Compulsory				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> Year/ 1 <sup>st</sup> semester				
Teacher's Name	Dr Cleo Varianou Mikellidou				
ECTS	10	Lectures / week	Up to 6 Teleconferences	Laboratories / week	None
Course Purpose and Objectives	<p>The objective of Risk Assessment &amp; Management is to equip students with the necessary theoretical and practical information regarding such risks. Basic and advanced statistical concepts will be introduced. Students will be provided with information on how to build up a deterministic risk assessment based on relevant health and safety legislation, literature reviews, case data and their professional knowledge and experience. The necessity of life-cycle risk evaluations for designed technical systems and technical processes will be emphasized. Heuristic risk assessment techniques will be taught. In addition, students will also be taught probabilistic and stochastic QRA methods which may be suitable for high risk/major hazard contexts. Risk assessment findings will be put in context with an aim to manage assessed risks across the spectrum of different workplace settings and apply ALARP and SFARP criteria appropriately. Feedback, employee and employer participation in risk reporting mechanisms will also be discussed.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Distinguish between pure risks such as H&amp;S and speculative/opportunity risks, in terms of characteristics, outcomes, assessment techniques and approaches to treatment, mitigation and control</li> <li>• Categorize and distinguish the various H&amp;S risks and ways of managing them</li> <li>• Explore the importance of safety legislation in the development of qualitative risk assessments</li> <li>• Use effectively statistical distributions</li> <li>• Compute statistical, probabilistic and stochastic risk assessment techniques</li> </ul>				

	<ul style="list-style-type: none"> <li>• Apply a life-cycle risk evaluation model to designed technical systems and processes.</li> <li>• Link and implement the results of a risk assessment in practice</li> <li>• Make and advise on risk decisions</li> <li>• Use the lessons learnt from the risk assessment exercise in order to mitigate across the organisation</li> <li>• Communicate risk assessment results</li> </ul>		
Prerequisites	None	Co-requisites	None
Course Content	<p>Risk Assessment &amp; management will help students differentiate between the various H&amp;S risks in the workplace and the different ways of dealing with them. The presence of major hazards, and the possible impact of a major hazard accident, may dictate the use of probabilistic – stochastic methods in addition to heuristic and deterministic techniques. The relevance of legislation and the existing body of knowledge on cause-effect behaviour of hazards in the development of deterministic risk assessments will be made apparent throughout the course, as will the need for up-to-date quantitative information in building up probabilistic – stochastic models. Results of risk assessment exercises and their use in risk management will be illustrated.</p>		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Readings:</b>  Lee T. Ostrom, Cheryl A. Wilhelmsen <i>Risk Assessment: Tools, Techniques, and Their Applications</i>, Latest Edition Wiley, ISBN-10: 1119483468</p> <p><b>Recommended Readings:</b>  Terje Aven, <i>Quantitative Risk Assessment - The Scientific Platform</i>, Cambridge University Press, (ISBN:9780521760577)</p> <p>Hyunyi Cho, Torsten Reimer, Katherine A. McComas <i>The SAGE Handbook of Risk Communication</i> Latest Edition, SAGE Publications, ISBN-10: 1452258686</p>		
Assessment	Final Examination	50%	
	Assignments/On-going evaluation	50%	
		100%	
Language	English		

Course Title	Safety Technology & Professional Practice				
Course Code	OSA610				
Course Type	Compulsory				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year/ 1 <sup>st</sup> semester				
Teacher's Name	Dr Cleo Varianou Mikellidou				
ECTS	10	Lectures / week	Up to 6 Teleconfer ences	Laboratories / week	None
Course Purpose and Objectives	<p>The objective of Safety Technology &amp; Professional Practice is to equip students with the necessary technical information that will enable them to identify and successfully handle combustion, electrical, mechanical, chemical, radiological and biological risks. The emerging importance of the inclusion of technological advancements in terms of instrumentation and software in the identification and control of such risks will be highlighted. As technology moves towards greater automation, the additional demands placed on design safety of both hardware and software will also be emphasized. In depth understanding of all such risks will enable students to understand the causes and impact of small and large scale accidents involving technology and investigate them. The results of all of the above will be made evident in the development of a tailor-made emergency plan for designed technical systems that will make use of the results of risk assessment.</p> <p>Despite the fact that this is a postgraduate degree and prepares students to undertake safety science related posts (professional, managerial, scientific etc.) and not safety technician roles, students should have an understanding of the practical aspects of OSH, the current market needs and shifts.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Implement precautionary measures as a part of a wider H&amp;S system in order to minimize the risk of an accidental (or non-accidental) fire and/or explosion</li> <li>• Implement precautionary measures as a part of a wider H&amp;S system in order to handle safely chemical, biological, radiological and carcinogenic agents</li> </ul>				



	<ul style="list-style-type: none"> <li>• Implement precautionary measures as a part of a wider H&amp;S system in order to minimize electro-mechanical risks (including HVAC systems, lighting)</li> <li>• Implement precautionary measures as a part of a wider H&amp;S system in order to handle noise, environmental and climatic risks</li> <li>• Integrate practical aspects of OSH in a learning context through targeted projects</li> <li>• Identify the causes of a technological accident and perform an accident investigation</li> </ul>		
Prerequisites	None	Co-requisites	None
Course Content	<p>Theoretical and practical knowledge will be offered. Stemming from Risk Assessment, students will explore in depth the application of safety legislation in workplace risks like noise, chemical, biological, radiological, nuclear, vibration, indoor environment, nanoparticle and other risks. On-site visit(s) to organizations already implementing similar safety technology systems will be conducted. Environmental issues with an emphasis on climate change risks to the worker related to safety will be discussed. The importance of the design of a holistic emergency plan taking in account employees, visitors, the general public, contractors and subcontractors will be illustrated.</p> <p>Part of the course will be based on the acquaintance with practical aspects of OSH. In particular, OSH professionals will be invited in class, targeted visits to organizations will be arranged. Part of the course grade will come from a focused mini-project on a practical OSH issue of an existing organization.</p>		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Readings:</b> Phillip K. Tompkins, Managing Risk and Complexity through Open Communication and Teamwork, Purdue University Press, ISBN-10: 1557537127</p> <p><b>Recommended Reading(s) :</b> Jeffrey Rose, Donald Lacher, Managing Public Safety Technology, Routledge; Latest Edition (ISBN 0323296092)</p>		

Assessment	Final Examination	50%	
	Assignments/On-going evaluation	50%	
		100%	
Language	English		

Course Title	OSA615 – Ergonomics, Psychosocial and Human Factors				
Course Code	OSA615				
Course Type	Compulsory				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year/ 2 <sup>nd</sup> semester				
Teacher's Name	Dr Cleo Varianou Mikellidou				
ECTS	10	Lectures / week	Up to 6 Teleconfer ences	Laboratories / week	None
Course Purpose and Objectives	OSA 615 aims to equip students with theoretical and practical knowledge on the important aspect of ergonomics, human and psychosocial factors in health and safety. Practical methods in the form of ergonomic design both in the office as well as the construction site environment will be highlighted and successful design methods will be applied. Psychosocial factors and their impact as well as the inclusion of health and safety in the design of working procedures will be analysed. Quantitative and qualitative methods of including human behavior in the successful design of safety systems among one of the aims of the course.				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify aspects of job tasks that may increase a worker's risk of developing MSDs, recognize the signs and symptoms of the disorders, and participate in the development of strategies to control or prevent them</li> <li>• Explore the impact of work-related stress on one's well-being.</li> <li>• Identify risks that lead to musculoskeletal pain</li> <li>• Relate limitations of human performance to various environmental and interpersonal conditions</li> <li>• Apply knowledge of human task performance limitations in the occupational environment with a view to improving safety</li> <li>• Apply the basic principles of occupational hygiene, including measurement, control and evaluation</li> <li>• Advise on practical control systems for air pollutants, skin irritants, noise, heat, etc</li> <li>• Advise on personal protective equipment and its limitations</li> </ul>				

Prerequisites	None	Co-requisites	None
Course Content	<p>Theoretical and practical knowledge will be offered. Indicative focus areas are:</p> <ul style="list-style-type: none"> <li>• Risk cognition and relevance to decision-making and human behavior in Health and Safety</li> <li>• Human factors relevant to H&amp;S and accident causation e.g. attention mechanism, sensory perception, risk cognition including 'hot' and 'cold' cognitions, habituation, expectancy, motivation, stress, learning etc.</li> <li>• Application of human factors in models such as the Hale &amp; Hale Model of Accident Causation</li> <li>• Group human factors such as safety culture, power relations and peer pressure and their role in individual risk decision making</li> <li>• Interdependence and mutual influence of group human factors and individual human factors such as risk cognition and motivation</li> <li>• Risk Homeostasis theory and its application</li> <li>• Application of 'person-work fit' principles to the design of organizational structures, business processes, work organization and performance measurement so as to reduce potential stress and mental health problems.</li> <li>• Psychology, anatomy, physiology, biomechanics and anthropometry in ergonomics</li> <li>• Application of individual ergonomic design principles to the 'person-task interface' in a variety of workplaces and types of work e.g. use of computers, plant control rooms, airline flight decks</li> <li>• Psychosocial factors and their importance on the ability and the performance to work</li> </ul>		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Reading(s):</b></p> <p>Sharon Clarke, Tahira M. Probst, Frank W. Guldenmund, Jonathan Passmore , The Wiley Blackwell Handbook of the Psychology of Occupational Safety and Workplace Health (Wiley-Blackwell Handbooks in Organizational Psychology) Latest Edition, ISBN-10: 9781118978986</p> <p>Gavriel Salvendy, Handbook of Human Factors and Ergonomics Latest Edition, Wiley ISBN-10: 0470528389</p>		

	<b>Recommended Reading(s) :</b> Applied Ergonomics, Elsevier ISSN: 0003-6870		
Assessment	Final Examination	50%	
	Assignments/On-going evaluation	50%	
		100%	
Language	English		

Course Title	Research Methods				
Course Code	OSA620				
Course Type	Compulsory				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year/ 2 <sup>nd</sup> semester				
Teacher's Name	Dr Christos Dimopoulos				
ECTS	5	Lectures / week	Up to 6 Teleconferences	Laboratories / week	None
Course Purpose and Objectives	<p>Objectives of this course are to cultivate the necessary academic skills that will be needed for conducting a research study in the area of their choice, while keeping a focus on the practical application of practical methods for research professionals in the area of OSH. They will gain a broad knowledge of various qualitative and quantitative data collection and analysis techniques and appreciate the significance of H&amp;S research to industry and government. In addition, the student should be able to evaluate the effectiveness of the research of others, and will be prepared to conduct evidence-based interventions and evaluations. As a result, students will be in a position to design and implement an H&amp;S research campaign and to present the research report to interested parties.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Critically appraise literature sources and conduct and compile a critical review of relevant literature to academic standards, which identifies gaps in the literature and proposes further studies to help close those gaps</li> <li>• Choose and apply the appropriate methodology to meet the student's specific research objectives for an identified study</li> <li>• Design and apply appropriate sampling frames for research purposes</li> <li>• Design and apply data collection programmes, including design and use of appropriate data collection instruments</li> <li>• Illustrate the difference between quantitative and qualitative research techniques and use them in practical applications</li> <li>• Choose appropriate techniques for Program Evaluation</li> <li>• Describe the underlying principles, processes and application of realist review and realist evaluation</li> <li>• Demonstrate how to analyze, critique, and synthesize OSH intervention research</li> </ul>				

Prerequisites	None	Co-requisites	None
Course Content	<p>As stated above, this course aims to familiarize students with the methods of H&amp;S Research and to assist them in the presentation, interpretation and application of research data. The following topics describe basic elements discussed and tested during the course:</p> <ul style="list-style-type: none"> <li>A. The role of OSH research</li> <li>B. The main research strategies (quantitative and qualitative)</li> <li>C. Research Planning and Design</li> <li>D. Measurement concepts in research</li> <li>E. Sampling and fieldwork</li> <li>F. Survey research methodology, including pros and cons of surveys</li> <li>G. Program Evaluation</li> <li>H. Qualitative Participatory Action Research</li> <li>I. Realist Research</li> <li>J. Intervention OSH Research</li> <li>K. Data analysis</li> <li>L. Development of a technical research report</li> <li>M. Ethical issues in conducting research.</li> </ul>		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Reading(s):</b> Bryman, A., Social Research Methods, Latest Edition, UK: Oxford University Press, ISBN: 9780198796053.</p> <p><b>Recommended Readings:</b> Creswell, J. W., Research design: Qualitative, quantitative, and mixed methods approaches, Latest Edition, California: SAGE. ISBN: 9781452226101.</p> <p>Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E. and Tourangeau, R. Survey Methodology, Latest Edition, Hoboken, New Jersey: Wiley. ISBN: 9780470465462.</p> <p>Emmel, N., Greenhalgh, J., Manzano, A., Monaghan, M., &amp; Dalkin, S. (Eds.) (2018). Doing realist research. SAGE Publications Ltd. ISBN:</p>		

9781473977891

Mark, M., G. Henry, and G. Julnes., Evaluation: An integrated framework for understanding, guiding, and improving policies and programs. San Francisco: Jossey-Bass. ISBN: 9780787948023.

Chevalier, J.M., & Buckles, D.J. (2019). Participatory Action Research: Theory and Methods for Engaged Inquiry (2nd ed.). Routledge. ISBN: 9781351033268

Melnik B. M., Morrison-Beedy D. (2012). Intervention research: Designing, conducting, analyzing, and funding. Springer. ISBN: 9780826109576



	<p><b>Recommended Reading(s):</b></p> <p>Christopher A. Janicak, <i>Safety Metrics: Tools and Techniques for Measuring Safety Performance</i>, Government Institutes, (ISBN1605902608)</p> <p>Christopher A. Janicak, <i>Applied Statistics in Occupational Safety and Health</i>, Government Institutes, (ISBN 0865871698)</p>		
Assessment	Final Examination	50%	
	Assignments/On-going evaluation	50%	
		100%	
Language	English		

Course Title	Project Management				
Course Code	OSA625				
Course Type	Elective				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year/ 2 <sup>nd</sup> semester				
Teacher's Name	Dr Christos Dimopoulos				
ECTS	10	Lectures / week	Up to 6 Teleconferences	Laboratories / week	None
Course Purpose and Objectives	The course is designed to help students appreciate the issues and methodologies involved in managing major projects, by drawing on a wide range of practical experience in project management. Students will be exposed to the continual assessment and implementation of sustainable practices in the process of managing a project				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Define project management and describe the major tasks duties and responsibilities of the project manager</li> <li>• Discuss the strategic importance of capital projects, through cases studies and real business scenarios</li> <li>• Define, plan and organize resources associated with capital projects which entail significant H&amp;S risks</li> <li>• Identify, plan and organize the sequencing and timetabling for necessary H&amp;S risk assessments within the overall project.</li> <li>• Apply appropriate techniques such as logic and sequence diagrams, Gantt Charts and slip charts and proceed with all the necessary steps for project control and assessment</li> <li>• Monitor projects effectively and any associated risks and managerial issues pertaining the projects</li> <li>• Integrate sustainability practices into project management processes</li> </ul>				
Prerequisites	None		Co-requisites	None	
Course Content	Project-based management is becoming the new general management tool in the contemporary business world since nearly all managers are involved in projects. The course presents a systematic approach to managing projects in a sustainable manner, benefiting students in their day-to-day work and allowing them to apply models and techniques for planning, implementing, communicating, evaluating and completing projects through the lens of sustainability.				

	<p>Introduction to Project Management , Modern Project Management.</p> <p>Organization Strategies and Project Selection Organization: Structure, Processes and Culture.</p> <p>Project Organization. Defining the Project. Selecting the Project Manager and Team. Defining the scope and Objectives, planning the project format. Defining the work break down structure.</p> <p>Diagramming the network, Developing the Schedule, Estimating Project Times and Costs, Developing a Project Plan, Managing Risk, Scheduling Resources, Reducing Project Duration. Project Implementation, Project Control and assessment, Risk and Issue management</p> <p>Leadership: Being an Effective Project Manager, Managing Project Teams</p> <p>Progresses and Performance Measurement and Evaluation, Project Audit and Closure</p> <p>The Need for Sustainability, Global Inentives and Evolution of Sustainability Models, Sustainable Development Goals</p> <p>Sustainability and Projects, The GPM P5 Standard for Sustainability in Project Management</p> <p>The Fundamental Concepts, Principles, and the Lifeccycle of the PRiSM Methodology</p>		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Reading(s):</b> Clifford Gray and Erik Larson, Project Management: The Managerial Process, Latest Edition, McGraw Hill, (ISBN 9780073403342)</p> <p><b>Recommended Reading(s) :</b> Carboni, J., Duncan, W., Gonzalez, M., Milsom, P., Young, M., Sustainable project management: The GPM reference guide. GPM Global. ISBN: 978-0-578-19688-6</p>		
Assessment	<p>Final Examination</p> <p>Assignments/On-going evaluation</p>	<p>50%</p> <p>50%</p> <p>100%</p>	
Language	English		

Course Title	Process and Chemical Safety				
Course Code	OSA630				
Course Type	Elective				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year/ 2 <sup>nd</sup> semester				
Teacher's Name	Prof. Georgios Boustras				
ECTS	10	Lectures / week	Up to 6 Teleconferences	Laboratories / week	None
Course Purpose and Objectives	<p>The process industry (oil &amp; gas, chemical and petrochemical) is a an important element of this Master in Occupational Safety and Health. Students will be introduced to the technical aspects of process safety and will be acquainted with the impacts of low probability / high impact accidents, resulting from process safety breaches. Big Accidents, could potentially produce impacts in various levels, such as economic, health, political, economic and societal. Students will be given the opportunity to analyze previous emblematic accidents and do step-by-step accident investigations; impacts to safety policy making will be discussed with realistic examples of national, EU and international policies and directives. The whole risk nexus (risk perception, risk assessment, risk management and risk communication) will be associated to the concept of process safety. Particular emphasis will be paid to Environmental issues and their impact. Finally, chemical safety will be analysed through the wealth of EU and International legislation(s) and directives that are available to support the practitioner in handling them and the protection of the public.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Perform Qualitative Risk Assessments (QRA) - Manually and by use of specialist computer software</li> <li>• Handle Safety Statistics - the importance, collection and use of published statistics and previous case studies in process safety</li> <li>• Establish Safety Management Systems (SMS) - Implementation of effective SMSs and their impact on risks and risk assessment</li> <li>• Perform Environmental Impact Assessment (EIA)</li> <li>• Apply Hazard and Operability Studies (HAZOPS) and participate as a HAZOP Chairman or Secretary</li> <li>• Use effectively Fault Tree Analysis (FTA) and Event Tree Analysis (ETA), including structured development and use of probabilistic trees</li> <li>• Use effectively Fault Tree Analysis (FTA) and Event Tree Analysis (ETA), including structured development and use of probabilistic trees</li> <li>• Analyze and investigate big, emblematic accidents and identify the lessons learned process that leads to policy making</li> <li>• Analyze the current chemical safety legislation with an emphasis on</li> </ul>				

	<p>the SEVESO III, Offshore, REACH, CLP Regulations and Legal framework for mineral extraction and permitting procedures for exploration and exploitation in the EU</p> <ul style="list-style-type: none"> <li>• Compile statutory Safety Reports and/or Safety Cases for defined major hazard sites, installations or operations</li> <li>• Apply Quantitative Risk Assessment techniques to the process industry</li> </ul>		
Prerequisites	None	Co-requisites	None
Course Content	<p>Process safety risks. High energy processes and high energy/high toxicity substance inventories. Major accident causes, consequences and preventative action. Personnel health and safety. SMS and MAPP. Process safety analysis. Loss prevention. Process safety in design. Process safety in operations. Defining and quantifying risk. Checklists. Hazard and operability analysis (HAZOP) studies. Hazard analysis (HAZAN) techniques. Human factors and human error in major hazard accidents. Linking HAZOPs, process control. Cost of plant safety. Environmental Impact Assessment (EIA). Case studies of serious plant accidents e.g. Buncefield, BP Grangemouth, Flixborough, Piper Alpha, BP Deepwater Horizon, Mari-Vassilikos. EU Major Hazards Directive 82/96 requirements on site owners and operators. Preparation and content of Safety Reports. Preparation and content of Safety Cases.</p>		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Reading(s):</b>  Frank Lees, <i>Lees' Loss Prevention in the Process Industries: Hazard Identification, Assessment and Control</i> (3 Volumes), Latest Edition Butterworth-Heinemann, ISBN-10: 0123971896</p> <p><b>Recommended reading(s):</b>  Alan Waring, <i>Corporate Risk and Governance: An End to Mismanagement, Tunnel Vision and Quackery</i> Latest Edition, Routledge, ISBN-10: 9781138274761</p> <p><i>Journal of Loss Prevention in the Process Industries</i>, Elsevier, ISSN: 0950-4230</p>		
Assessment	Final Examination		50%
	Assignments/On-going evaluation		50%
			100%
Language	English		

Course Title	Critical Entities Protection & Resilience				
Course Code	OSA635				
Course Type	Elective				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year/ 2 <sup>nd</sup> semester				
Teacher's Name	Dr Olga Nicolaidou				
ECTS	10	Lectures / week	Up to 6 Teleconfer ences	Laboratories / week	None
Course Purpose and Objectives	<p>The aim of the Critical Entities Protection &amp; Resilience course is to introduce students to the importance of occupational safety and security threats to large scale major hazard installations, which provide utilities and services that are critical to the functioning of a country, including large sectors e.g. energy supplies such as oil refineries, petroleum and gas fuel distribution, electrical power generation and transmission, water treatment and supplies, and gas processing terminals. Environmental, societal, and financial dimensions of security and safety of large scale major hazard installations will also be dealt with. Owing to time limitations, natural disasters and other critical infrastructure such as nuclear power stations, railways and telecommunications will not be the main focus of this course, although their importance is recognized. The process of identification of Critical Entities and their importance to modern societies will be highlighted. Students will be taught how to identify and understand threats. Analysis of interdependencies between CI and the link between safety and security will be explored. Finally, students will develop (a) Major Accident Prevention Policies (MAPPs) for EU Seveso II Directive compliance, (b) Operational Security Plans.</p>				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify local / National / EU critical entities</li> <li>• Highlight major hazard and security threats</li> <li>• Identify critical / vulnerable components of Critical Entities</li> <li>• Evaluate major hazard safety measures/MAPPs</li> <li>• Evaluate security measures / Operational Security Plans</li> <li>• Report methods to revise major hazard safety and security of vulnerable assets</li> <li>• Demonstrate mitigation of a critical infrastructure threat</li> <li>• Understand interconnections between Critical Entities and societal impacts</li> </ul>				

Prerequisites	None	Co-requisites	None
Course Content	Introduction to <b>Critical Entities</b> and their role in modern societies. Local / National / EU <b>Critical Entities</b> . European and National approaches to <b>Critical Entities</b> protection. Directive 114/2008 and <b>EU Directive 2022/2557</b> and their implementation on a national and <b>entity</b> level. Identification and analysis of critical <b>entities</b> systems including major hazards and security threat assessments. Includes mitigation of threats as well as evaluation and revision of major hazards and security measures in order to protect critical <b>entities</b> . Examples of MAPPs, statutory Safety Reports/Safety Cases and Operating Security Plans. Analysis of interconnectivity and interrelationships between <b>Critical Entities</b> . Sectoral examples and case studies: Energy (electrical power generation/transmission, oil refineries, gas processing terminals, fuel supplies), Water (bulk chlorine major hazards at treatment installations), Transport (bulk fuel road tankers).		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Reading:</b>  Kelley Cronin, Nancy E. Marion, <i>Critical Infrastructure Protection, Risk Management, and Resilience: A Policy Perspective</i> Latest Edition, CRC Press, ISBN-10: 1498734901</p> <p><i>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</i>, European Commission, Brussels, 2012</p>		
Assessment	Final Examination	50%	
	Assignments/On-going evaluation	50%	
		100%	
Language	English		

Course Title	Fire Safety Management				
Course Code	OSA640				
Course Type	Elective				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	1 <sup>st</sup> year/ 2 <sup>nd</sup> semester				
Teacher's Name	Prof George Boustras				
ECTS	10	Lectures / week	Up to 6 Teleconfer ences	Laboratories / week	None
Course Purpose and Objectives	The objective of Fire Safety Management is to equip students will all necessary practical and theoretical that will enable them to prepare a successful, targeted fire strategy. Students will become familiar with performance based aspects of fire safety management and fire safety engineering. The importance of carrying out successful fire risk assessments of deterministic and / or probabilistic nature and the use of their results will be integrated in the learning experience. The use of specialist made software for the calculation of important aspects of fire safety such as radiation, evacuation times and other important aspects.				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify risks related to fire in the built environment</li> <li>• Use National, EU and International fire safety legislation</li> <li>• Distinguish between the different protective measures and means that have to be adopted in the different phases of the building life</li> <li>• Develop deterministic and probabilistic fire risk assessments</li> <li>• Design a tailor made fire safety protection system based on the outcome of a successful risk assessment</li> <li>• Use specialist software to design fire-safe buildings</li> <li>• Develop focused fire strategies</li> </ul>				
Prerequisites	None		Co-requisites	None	
Course Content	The module will concentrate upon the identification, design and implementation of fire safety management measures and techniques during the design phase and the actual life of the building. A number of issues will be dealt with during the course, among them:				



	<ul style="list-style-type: none"> <li>• Fire Safety Legislation from Cyprus, UK, USA, Japan etc.</li> <li>• Fire Dynamics</li> <li>• Deterministic and probabilistic fire risk assessment</li> <li>• Design of passive fire protection</li> <li>• Design of active fire protection</li> <li>• Performance based codes versus legislation</li> <li>• Design of egress using hand calculations and/or simulators.</li> <li>• Evacuation experimentation, modeling and techniques</li> <li>• Fire Strategies</li> </ul>						
Teaching Methodology	E-Learning						
Bibliography	<p><b>Required Reading(s):</b></p> <p>Daniel E. Della-Giustina, <i>Fire Safety Management Handbook Latest Edition</i>, CRC Press, ISBN-10: 9781482221220</p> <p><b>Recommended Reading(s) :</b></p> <p>Ganapathy Ramachandran, David Charters, <i>Quantitative Risk Assessment in Fire Safety</i>, Routledge, (ISBN 0419207902)</p> <p>Michael Hasofer , V.R. Beck, I.D. Bennetts, <i>Risk Analysis in Building Fire Safety Engineering</i>, Butterworth-Heinemann, (ISBN 075068156X)</p> <p>Bjorn Karlsson, James Quintiere, <i>Enclosure Fire Dynamics</i>, CRC Press</p>						
Assessment	<table border="1"> <tr> <td>Final Examination</td> <td>50%</td> </tr> <tr> <td>Assignments/On-going evaluation</td> <td>50%</td> </tr> <tr> <td></td> <td>100%</td> </tr> </table>	Final Examination	50%	Assignments/On-going evaluation	50%		100%
Final Examination	50%						
Assignments/On-going evaluation	50%						
	100%						
Language	English						

Course Title	Occupational Health and Well-Being				
Course Code	OSA645				
Course Type	Elective				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	2 <sup>nd</sup> year/ 3 <sup>rd</sup> semester				
Teacher's Name	Dr Olga Nicolaidou				
ECTS	10	Lectures / week	Up to 6 Teleconfer ences	Laboratories / week	None
Course Purpose and Objectives	OSA645 introduces students to the most important concepts around occupational health and the interaction between health and the workplace environment. The various occupational hazards and their effects on human health and well-being will be examined, as well as practical issues around risk prevention and management, monitoring, health surveillance and assessing fitness for work.				
Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"> <li>• Illustrate in theory and practice how occupation affects the health and well-being of workers in different ways</li> <li>• Identify hazards at the workplace and the environment that pose a threat to human health and well-being</li> <li>• Apply methods to monitor and control hazards at the workplace in a rational and effective way</li> <li>• Experiment with the operational complexities around monitoring, maintaining and protecting the health of workers, and managing occupational risks</li> <li>• Identify the most common occupational diseases and their public health significance</li> <li>• Evaluate the factors that influence a person's fitness for work in general and for particular work tasks</li> </ul>				

Prerequisites	None	Co-requisites	None
Course Content	<p>The aim of this course is to understand how occupation affects the health and well-being of workers in different ways, to identify hazards at the workplace and the environment that pose a threat to human health and well-being. Students will apply methods to monitor and control hazards at the workplace in a rational and effective way, understand the operational complexities around monitoring, maintaining and protecting the health and well-being of workers, and managing occupational risks. They will identify the most common occupational diseases and their public health significance, understand the factors that influence a person's fitness for work in general and for particular work tasks. Finally, operational and ethical issues in occupational health; risk assessment and risk management and principles of environmental health will be explored and tested.</p>		
Teaching Methodology	E-learning		
Bibliography	<p><b>Required Reading(s):</b></p> <p>Smedley, Julia, Finlay Dick, and Steven Sadhra, eds. <i>Oxford handbook of occupational health</i>. Oxford University Press. Oxford, 2013.</p> <p><b>Recommended Reading(s) :</b></p> <p>Waldron, HA. <i>Occupational health practice</i>. Butterworth-Heinemann, 2013.</p>		

<b>Assessment</b>	Final Examination Assignments/On-going evaluation	50%	
		50%	
		100%	
<b>Language</b>	<b>English</b>		

course Title	Master Thesis				
Course Code	OSA650				
Course Type	Compulsory				
Level	Master (2 <sup>nd</sup> Cycle)				
Year / Semester	2 <sup>nd</sup> year/ 3 <sup>rd</sup> semester				
Teacher's Name	Prof. George Boustras				
ECTS	15	Lectures / week	None	Laboratories / week	None
Course Purpose and Objectives	<p>The aim of this course is to provide students with a combination of theoretical tools as well as the ability to investigate practical health and safety related issues. In order to enhance the practical aspect of the thesis, a second (external) supervisor with a practitioner background can be part of the team. To assist the students in conducting more practical research projects, appropriate instruments are available in the EUC safety lab and can be used for specific times. The Master Thesis will be a research investigation into a safety related science issue utilizing primary and secondary investigation, techniques and data sources. The investigation will require the use of all the theoretical and practical skills acquired during the tuition of the students in this Master course. Problem definition, a thorough literature review, methodological decisions, data collection and analysis and finally conclusions and recommendations will be the milestones to be reached during the work. Students will work independently under the supervision of a relevant (research wise) member of staff. Innovation and creation of novel knowledge will be the aim of this study.</p>				

Learning Outcomes	<p>Upon successful completion of this course students should be able to:</p> <ul style="list-style-type: none"><li>• Formulate a related research question via a review of the activities and operations organization/ business sector and the environment within which it operates</li><li>• Choose from different research methodologies, illustrate their limitations and be able to explain when one might be more appropriate than other in the context of the chosen research project</li><li>• Apply appropriate qualitative and quantitative research methods including action research and observations as necessary to analyze organizational/safety sector strategic problems</li><li>• Record, interpret and analyze qualitative and quantitative data relating to the research topic</li><li>• Explain that the project findings have been logically derived and that conclusions, solutions/recommendations are fully supported by evidence</li></ul>
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Prerequisites	None	Co-requisites	None
Course Content	<p>During the conduct of the Master's project, the following issues will have to be dealt with:</p> <ul style="list-style-type: none"> <li>• independent application of theory to the relevant safety management field</li> <li>• independent conduct of research/generation of a solution to a practical problem</li> <li>• acquisition of more in-depth knowledge and application of it to the field of study</li> <li>• demonstration of skills (including verbal and written communication skills) acquired in completing the Master's program curriculum</li> <li>• finishing of the assignment within the time permitted</li> </ul> <p>To this end, the student independently develops and implements a research-oriented and/or design oriented project. He completes the project within the time permitted; justifies the models, theories, methodology and techniques used, as well as the research/design process as a whole; analyses the work completed; and makes both an oral and written report of his work.</p> <p>Students will be required to produce a report of between 10,000 to 15,000 words excluding appendices and references.</p>		
Teaching Methodology	E-Learning		
Bibliography	<p><b>Required Reading(s):</b> John W. Creswell, Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, Sage Publications, Inc; Latest Edition</p> <p><b>Recommended Reading(s) :</b> Larry B. Christensen, R. Burke Johnson, Lisa A. Turner, Research Methods, Design, and Analysis, Latest Edition, Allyn and Bacon</p>		
Assessment	Project	100%	100%
Language	English		

## **ANNEX 2 – Examples of Student Assessment promoting Critical Thinking**

### **OSH 620**

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Study carefully the following article:

Bahn, S. (2003), Workplace hazard identification and management: The case of an underground mining operation, *Safety Science*, Volume 57, PP.129-137.

<https://doi.org/10.1016/j.ssci.2013.01.010>

Search the academic literature and identify two (2) additional academic articles which showcase the use of the participatory action research approach in occupational environments, like the article of Bahn.

Develop a technical report of around 3000 words, critically reflecting on the contents and the implications of the research activities and the research results presented in the three papers (the one provided plus the additional two identified through searching the literature). In particular, the report should contain the following sections:

1. A brief summary of the article aim and objectives of each of these papers.
2. A short description of the research methodology employed in each of these these papers with a focus on the elements employed which showcase the use of participatory action research as the basis for the elicitation of research information
3. A critical comparison of the three articles, with regards to the similarities and the differences in the application of the participatory action research approach between the articles, and with regards to the implications of the research results for the OSH profession
4. A critical discussion on the possible limitations of the participatory action research approach based on the contents of these articles.

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### **OSH625**

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Study carefully the following resources:

Bivins, S. S. (2014). A transformational change at IBM. Paper presented at PMI® Global Congress 2014—North America, Phoenix, AZ. Newtown Square, PA: Project Management Institute

<https://www.pmi.org/learning/library/transformational-change-ibm-9297>

Tefi, A. (2022) How IBM Became A Multinational Giant Through Multiple Business Transformations, *Cascade Strategy*

<https://www.cascade.app/studies/how-ibm-became-a-multinational-giant-through-multiple-business-transformations>



Search the academic / industrial literature and identify two (2) additional cases of organisational transformation processes for multinational corporations which have been documented.

Develop a technical report of around 3000 words, critically reflecting on the organisational transformation processes of these cases (the IBM case plus the additional two identified through searching the literature). In particular, the report should contain the following sections:

1. A brief summary of the organisational transformation process followed in each of the cases.
2. A critical comparison of the technical characteristics and of the process followed in each of the three organisational transformation cases.
4. A critical discussion on the outcomes of each organisational transformation process, with a focus on the relative merits and drawbacks of each case.

## ANNEX 3

**TABLE 2: COURSE DISTRIBUTION PER SEMESTER**

A/A	Course Type	Course Name	Course Code	Periods per Week	Period Duration in Minutes	Number of weeks/ Academic Semester	Total Hours/ Academic Semester	Number of ECTS
<b>1<sup>st</sup> Academic Year/1<sup>st</sup> Semester</b>								
1.	Compulsory	Introduction to Safety Management & OSH Legislation	OSA600	N/A	N/A	14	N/A	10
2.	Compulsory	Risk Assessment & Management	OSA605	N/A	N/A	14	N/A	10
3.	Compulsory	Safety Technology & Professional Practise	OSA610	N/A	N/A	14	N/A	10
<b>1<sup>st</sup> Academic Year/2<sup>nd</sup> Semester</b>								
4.	Compulsory	Ergonomics, Psychosocial and Human Factors	OSA615	N/A	N/A	14	N/A	10
5.	Compulsory	Research Methods	OSA620	N/A	N/A	14	N/A	5
6.	Compulsory	Master Thesis	OSA650	N/A	N/A	N/A	N/A	15
<b>2<sup>nd</sup> Academic Year/3<sup>rd</sup> Semester (3 electives from the list below)</b>								
7.	Electives		-----	N/A	N/A	14	N/A	30

**\* Elective Courses**

**Students choose three (3) from the following courses:**

1.	OSA625 Project Management	10
2.	OSA630 Loss Prevention and Process Safety in the Oil, Gas, Petrochemical and Chemical Industries	10
3.	OSA635 Critical Entities Protection and Resilience	10
4.	OSA640 Fire Safety Management	10
5.	OSA645 Occupational Health and Wellbeing	10

**TABLE 1: STRUCTURE OF THE PROGRAMME OF STUDY**

<b>PROGRAMME REQUIREMENTS</b>	<b>ECTS</b>
All students pursuing the E-Learning program of study “ <b>Occupational Safety and Health (M.Sc.)</b> ” must complete the following requirements:	
<b>Compulsory Courses</b>	<b>45</b>
<b>Master Thesis</b>	<b>15</b>
<b>Elective Courses</b>	<b>30</b>
<b>Total Requirements</b>	<b>90</b>

<b>Compulsory courses</b>			<b>45 ECTS</b>
	<b>Code</b>	<b>Course Title</b>	<b>ECTS</b>
1	OSA600	Introduction to Safety Management & OSH Legislation	10
2	OSA605	Risk Assessment & Management	10
3	OSA610	Safety Technology & Professional Practise	10
4	OSA615	Ergonomics, Psychosocial and Human Factors	10
5	OSA620	Research Methods	5
<b>Master Thesis</b>			<b>15 ECTS</b>
6	OSA650	Master Thesis	15
<b>Elective Courses</b>			<b>30 ECTS</b>
<b>Students choose three (3) from the following courses:</b>			
7	OSA625	Project Management	10
8	OSA630	Process and Chemical Safety	10
9	OSA635	Critical Entities Protection and Resilience	10
10	OSA640	Fire Safety Management	10
11	OSA645	Occupational Health and Wellbeing	10



*EUC E-Learning Programmes of Study:  
Educational Principles, Teaching Philosophy and  
Methodology*

October 2023

## A Note on this Document

This document is intended primarily for all academic staff involved in course design and teaching on the E-Learning programmes of study at European University Cyprus (EUC). The document introduces the essential elements of the pedagogical/educational principles and teaching philosophy employed on all E-Learning courses at EUC. The document breaks down into the following sections:

1. Introduction to e-learning at EUC
2. The Distance Education Unit
3. The EUC e-learning pedagogical/educational model
4. The main principles of e-learning:
  - a. Learner-centred learning design
  - b. Inclusive design
  - c. Co-design
  - d. Interactive and collaborative learning
5. Support for e-learning at EUC
  - a. Learning resources
  - b. Academic guidance and support
  - c. Administrative support
6. The fundamental structure of EUC's E-Learning Courses
  - a. Course structure
  - b. Synchronous meetings
  - c. Asynchronous communication
  - d. Course assignments
  - e. Final exams
7. Student assessment in E-Learning courses
8. Programmes' quality assurance

## **1. Introduction to e-learning at EUC**

European University Cyprus (EUC) has always met the differing educational needs of society by using the most up-to-date tools. As part of this mission, since 2013, EUC has offered fully recognized E-Learning Bachelor's (undergraduate) and Master's (postgraduate) programmes of study. The aim is to provide access to education for as many people as possible, particularly those who may not have had otherwise the chance to attend a programme of study.

Academic staff of the Departments and Schools teaching on E-Learning programmes of study have prolonged experience of instruction in tertiary education and research in their fields of study. All instructors receive ongoing professional development and training in e-learning, particularly in the use of communication technologies for teaching and learning. This combination of instructors' proficiency in their discipline, prolonged experience in e-learning, combined with the modern infrastructure of EUC, is what guarantees the quality of EUC's E-Learning programmes of study.

## **2. The Distance Education Unit**

The Distance Education Unit (DEU) provides the administrative support for the E-Learning programmes of study of EUC. The Unit supports both students and academic staff of EUC's E-Learning programmes of study, by ensuring quality access to educational materials and technological resources. Students receive initial instruction in the use of the educational platform from the DEU, as well as ongoing advice, and if they have issues with the technology or delivery of their courses (not the academic content) then they bring these up with the DEU. The Unit also helps coordinate the production of training materials and courses, as well as coordinating with other administrative elements of the University, such as the Office of the Vice-Rector of Academic Affairs, the Department of Information Systems and Operations, the Department of Enrollment, and the Registrar's Office. Its mission is to ensure that e-learning is a vital element in all aspects of the University's academic and administrative policies and actions.

## **3. The EUC e-Learning Pedagogical/Educational Model**

E-learning at EUC works according to a flexible pedagogical/educational model that considers the needs of the student, the requirements of the discipline, and the technological infrastructure. It promotes best practice in instructional design and educational delivery and provides useful guidelines against which instructors can assess their own educational practices.

This model follows the latest pedagogical guidelines and recommendations for the design and development of E-Learning programmes of study distributed by the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CY.Q.A.A.), including announcements of CY.Q.A.A. on 29.4.2020 and 4.5.2020 on E-Learning programmes of study, Study Guides and e-learning interactive activities. The model is regularly updated to ensure compliance with all requirements of the national framework. The EUC pedagogical model also takes into consideration the requirements and special characteristics of the legislation of countries other than Cyprus from which EUC E-Learning programmes of study have a large number of students (e.g., Greece), as well as the fundamental functioning principles of the Open University of Cyprus, the Hellenic Open University, and other international Open Universities.

The **Blackboard Learn Ultra platform** is the environment that provides access to learning resources and content and supports the students' interaction with the material, their instructors, and their classmates.

#### **4. The main principles of e-learning**

The EUC Pedagogical/Educational Model is based on the following learning principles:

- Learner-centred learning design
- Inclusive design
- Co-design
- Interactive and collaborative learning

Each of these principles are described below.

##### **a. Learner-Centred learning design**

The student holds a predominant position in the EUC pedagogical model. The entire process revolves around designing areas and resources to enable the student's learning. Information related to the E-Learning programmes of study are publicly available and objectives and expected learning outcomes of the courses, as well as grading policies, are available to all students and potential students. At the beginning of each semester, during the first synchronous session with students, each instructor goes through her/his course outline and discusses with students the course content, learning process, activities, and assignments. Students have the opportunity to make suggestions and customizations, bearing in mind that the fundamental content and objectives of the course cannot be altered as these were accredited by CY.Q.A.A. Meaningful learner-centred learning is also achieved by taking account of students' background, professional and prior education experiences, as well as taking advantage of opportunities for customization of the e-learning experience and learning activities based on students' own needs and interests. Finally, towards the end of each semester, students are asked to evaluate each of their courses online. Submission is anonymous and the time it takes to fill out the evaluation form is around 10-15 minutes. The survey pertains all aspects of the course and the overall learning experience of the student (hence named the Survey on 'Student Feedback on their Learning Experience' -SFLE), such as the course structure and content, the faculty performance, the facilities involved, the administrative support, etc. The information received are forwarded to faculty to review and act accordingly. The Chairperson of the Department also reviews the aggregated information per course and makes recommendations where needed.

##### **b. Inclusive design**

The inclusive design implementation of Universal Design for Learning (UDL) principles is one of the main concerns of the programme design and development of all EUC programmes of study. The UDL principles in EUC's E-Learning programmes of study are implemented as shown in the table that follows:

UDL Principles	Activities and Course Design	Means, Technology and Tools
Provide options for Engagement	<ul style="list-style-type: none"> <li>-Organisation of the course in weeks/themes/units with indicative timeframe for study</li> <li>-Facilitation of self-paced learning/study</li> <li>-Regular contact with instructor in a variety of ways</li> <li>-Assignments and learning activities linked to personal experiences, background, professional status, etc. (e.g., variations of practical experience, assignments linked to own experiences and work environment)</li> <li>-Compulsory and optional activities</li> <li>-Opportunity to choose some graded activities over others.</li> <li>-Options for individual and group activities and assignments</li> <li>-Options for authentic work (e.g., conducting small research projects in activities, assignments that avoid reproduction of literature but entail practical/implementation sections)</li> <li>-Variety in assessment methods (e.g., projects, portfolios, quizzes, open-ended questions, public dialogue discussions, discussion forum)</li> </ul>	<ul style="list-style-type: none"> <li>-LMS Blackboard Learn Ultra with accessibility features</li> <li>-Study guides available in various forms (word document, pdf) as well as content structured on platform follows the study guides</li> <li>-LMS build-in communication tools (e.g., discussion forums, chat options and messaging)</li> <li>-Options for communication off platform (e.g., blogs, personal IM, social network closed groups, video channels)</li> </ul>
Provide options for Representation	<ul style="list-style-type: none"> <li>-Alternative options of introduction of new knowledge and content (e.g., readings, teleconferencing, slide notes, pre-recorded videos, links to external content)</li> <li>-Both English and Greek literature (for programmes offered in Greek)</li> <li>-Uses of Glossary (in some courses that terminology is especially important)</li> <li>-Use of synchronous and asynchronous content connection activities (e.g., wikis, presentations, mind-mapping)</li> </ul>	<ul style="list-style-type: none"> <li>-Videos (accessible where possible)</li> <li>-Text on platform (online documents)</li> <li>-Visuals (e.g., diagrams, images, mind-maps)</li> <li>-Hyper-titles where possible</li> <li>-Recorded teleconferencing meetings available to all</li> </ul>
Provide options for Action and Expression	<ul style="list-style-type: none"> <li>-Synchronous and asynchronous options for interaction (student-student, student-instructor, student-content, student-platform) through various channels</li> <li>-Variety in assessment methods (e.g., projects, portfolios, quizzes, open-ended questions, public dialogue discussions, discussion forum)</li> <li>-Variety of types of questions in final exams (by regulation all need to be written exams)</li> <li>-Creative assignments (e.g., presentations, repositories of resources, peer review activities)</li> </ul>	<ul style="list-style-type: none"> <li>-Interactive videos</li> <li>-Interactive (user-controlled) content (e.g., through authoring tools such as H5P)</li> <li>-Alternative accepted modes of communication (e.g., email, IM, discussion forum, chat, social media closed groups)</li> <li>-Alternative accepted modes of class participation (e.g., written, auditory, video presentations)</li> <li>-Access to Assistive Technology and reasonable adaptations through the Committee for the Support of Students with Disabilities</li> </ul>



	-Assignments broken in consecutive sections/parts during the semester (one building on the other)	and/or Special Educational Needs (E.Φ.E.E.A.)
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In addition to the above, inclusive e-learning design takes into consideration the students' workload (including assignments, examinations, learning outcomes and course literature) calculated in accordance with the ECTS of each course, and involves a variety of assessment methods that enable students to engage with and practice diverse skills and meet varying challenges. Various forms of written and oral examinations and assignments support the learner's general competencies. These include both individual and group work.

Where appropriate and possible, in order to ensure interconnections between theories and practice, syllabi comprise both theoretical and practical content; in particular, instructors are encouraged to develop assignments and examinations where students are required to use their experience gained from practice, in order to connect theory with practice. Finally, instructors provide support adjusted to students' individual abilities, learning needs, and learning opportunities.

The University's annual Faculty Development Programme provides development training activities in inclusive design, as well as in differentiation and UDL in higher education.

### **c. Co-design**

The instructors and the course coordinators, under the supervision and guidance of each program coordinator, regularly update their study guides to incorporate insights from ongoing training in learner-centred and inclusive design. Moreover, at the beginning and around the middle of the semester the program coordinator invites the instructors to a meeting to exchange opinions on students' issues and course delivery.

### **d. Interactive and collaborative learning**

E-learning at EUC is designed in ways to promote interaction in various levels (learner-learner, learner-instructor, learner-content, learner-technology). The ultimate goal is to enhance the interaction between students and the learning that can only occur among motivated individuals working together. Interactive learning is a hands-on/real life approach to education founded upon building student engagement through guided social interaction connected with existing knowledge and their own experience and interests, with carefully designed and structured activities to facilitate learning in groups and challenge students to develop practical skills.

Interactive learning seeks to enhance the interaction between learners and:

1. the course materials
2. the instructor
3. their peers

Interactive learning emphasizes the active engagement of the learner in enrichment activities which aim at the practical and critical application of the theoretical knowledge. When interactive learning takes place within the contexts of student-material interaction, the student should be able to receive immediately feedback during her/his interaction with the course materials, and thus interactive learning will provide self-assessment opportunities. Interactive learning is, thus, a hands-on, real-life approach to education founded upon

building activities to facilitate learning individually and/or in groups, challenging students to develop and apply practical scientific-specific skills and knowledge which are meaningful, connected to their existing theoretical knowledge, personal experiences, interests and (academic and professional) goals. The focal point of interactivity is always on the skills of learners, not the capabilities of the technology that seeks to facilitate learning.

Self-assessment and interactive exercises/activities are presented on a weekly basis. Such activities uphold the interest of students, motivate consistent participation and long-term engagement. Examples of such interactive exercises are the following:

- role playing
- simulations
- real-life scenarios
- learning tools
- online discussions for debating
- the use of visualization tools to come to a specific outcome
- brainstorming activities for answering a theoretical question
- problem-solving questions in groups
- preparing group PowerPoint presentations (e.g., after watching a video or studying a specific source)
- answering quizzes and peer reviewing assignments of other students, etc.

Gamification strategies are also embedded in EUC's E-Learning programmes of study. In addition, great emphasis is placed on communities of learning and collaboration. Learning collaboratively refers to using teamwork, through communication and discussion with the instructor and other student mates, to solve problems, develop projects, create products, either independently or jointly, etc. The construction of new knowledge is combined with the professional and personal experience of students, individual and group research processes and activities, knowledge management via the Blackboard Learn Ultra tools, etc. Collaboration is intertwined, supplemented, and complemented with independent and autonomous learning, a necessary and needed condition of deep learning which is combined in a flexible way with other methodological approaches.

## **5. EUC support for e-learning:**

Through guidance and support, each student receives personalized attention according to their needs, from the first day of their enrolment in an E-Learning programme of study. EUC supplies the following supportive structures and resources for students on their e-learning courses:

### **a. Learning resources**

This can include educational materials expressly designed to support and convey the learning content, but it might also include other types of open educational resources and tools (either text, media, multimedia, digital documents, e.g., audible content, motion pictures, spreadsheets, photos, pdfs, graphics, etc. or material created by the students themselves), etc. EUC's

pedagogical/educational model is flexible and can be adapted to the special characteristics and objectives of each course.

#### **b. Academic guidance and support**

Students are guided and supported in all their academic activities by the instructors teaching in the E-Learning programmes of study. Course instructors provide tutoring and mentoring on the content of student's courses and their evaluation and assessment. The course instructor is the person in charge for the teaching and learning process of each course. They provide students with all the necessary information and resources for the delivery of the course. They are the persons responsible for the students' evaluation, as well as for the management of the learning content.

In addition, in alignment with relevant CY.Q.A.A. guidelines and respective open university international practices, for each course a Course Coordinator is appointed. Their role is to coordinate the course in case there are more than one sections regarding issues of content, design and elaboration of the learning activities, procedures, and student evaluation.

The Program Coordinator is the person in charge of the structure and the content of each program, as well as for resolving conflicts between instructors and the students or between the students and the administrative services of the University.

#### **c. Administrative support**

Students are also supported by Student Advisors and the members of the Distance Education Unit who counsel them on administrative related issues, the planning of their study, problem resolution, and decision-making issues (e.g., course selection and enrolment, the registration and payment of tuition fees, etc.).

### **6. The fundamental structure of EUC E-Learning Courses**

#### **a. Course structure**

Each course is carried out over 13 weeks, followed by a final exam week. Throughout the 13-week teaching period, up to six synchronous teleconferences are organised. The first of these is always scheduled for the first week of the semester after the orientation/familiarisation week (during which students become familiar with the **Blackboard Learn Ultra platform** and spend time studying the Course Outline and Study Guide of their courses); and the last is always scheduled in the last two weeks of the semester (always before the final examination week). The rest of the synchronous teleconference dates are set by the instructor of each course in coordination with the students in order to best accommodate their availability and needs. Though Study Guides and the Course Outlines are structured in weeks, instructors are free to design and present their course content and activities in any way they consider useful to facilitate students' organization of their self-paced study, as well as to help students follow the Course Outline and learning objectives as communicated to them at the beginning of the course. This may maintain the weekly format or follow a thematic organisation structure. In the case of thematic organisation, instructors should provide an indication of estimated week(s) of study, as well as matching with learning objectives and milestones of activities and course requirements during the semester.

## **b. Synchronous meetings**

Teleconferences are set up using **Blackboard Collaborate** which is an embedded e-learning collaboration tool of the Blackboard Learn Ultra LMS platform. This virtual classroom tool enables instructors to create an engaging and pedagogically innovative environment for students fostering e-learning. During the teleconferences, the instructor, as facilitator and moderator, presents the main points of the topic under discussion, discusses with students related fundamental issues and provides guidance as to the content and materials to be studied at home by the students over the following weeks. Teleconference sessions may also include opportunities for synchronous group or individual work by students. All material is provided beforehand on the **Blackboard Learn Ultra platform**, so that students have a chance to study it, prepare questions on the content and activities of the specific weeks, and discuss these during the synchronous session that follows. The assignments and activities that are to be conducted asynchronously (approximate weekly study time is estimated at 10 hours – excluding assignment preparation time), are also discussed in these synchronous teleconferences. More importantly, through these teleconferences, interaction between the students and the instructor is achieved as students are given, among other things, the opportunity to ask questions or share reflections with other students and their instructor. The instructor also prepares interactive activities (please see relevant section above) to be prepared for and conducted during the synchronous teleconferences.

## **c. Asynchronous communication**

During the semester, students communicate between themselves and with the instructor through the Blackboard Learn Ultra platform in an asynchronous form. The most common methods of asynchronous communication are by message, short chats, and discussion forums. Messages are personal or group, sent through the platform and delivered as an email message to recipients' email inbox. Short chat discussions in Blackboard Ultra are enabled over assignments or other tasks assigned on the platform and provide an opportunity for students to asynchronously exchange informal comments and ideas on any course item. Discussion forums can be either for general discussions (e.g., course inquiries), or assignment focused (graded or non-graded). For the latter, as appropriate per week or theme, students are engaged in collaborative activities and interaction such as discussion of particular course material. This material might have been either independently studied or presented and discussed in a videoconference synchronous learning meeting with the instructor.

## **d. Course assignments**

For each course, students need to carry out individual and group assignments which are graded. The type and nature of each assignment is presented to students at the start of the semester through multiple avenues of communication on the platform, such as in the Course Outline and course Study Guides. It is also explained and discussed during the synchronous teleconferences (as described above). These graded assignments may require preparing an answer to a theoretical question (for instance, discussion of a quote from an academic article or judgment/position or discussion) which involves extended research, rational analysis, critical thinking, and evaluation.

Other graded assignments may include responding to a focus/problem question, which involves comprehensive understanding of focal content issues.

To increase student motivation and engagement, collaborative and interactive tools are used, such as Padlet for group participation and group projects, Flashcards, game-based learning (e.g., Kahoot & Archy Learning, Simulations, etc.), interactive videos and other interactive activities (e.g., though H5P integrated in the learning platform). This kind of assignments are used mainly for formative evaluation and aim to enrich student's knowledge and skills on the learning objectives of the topic. Specific assignment topics for each course are described in detail in the Study Guide of each course and posted on the Blackboard Learn Ultra platform, alongside evaluation rubrics for assignments including the grade weighting attached to each one. Through assignments, students conduct research on a specific topic using the online databases of the University library as well as other electronic resources, either individually and/or in groups (thus interacting with each other, with the material of the course, and with the instructor).

Apart from presenting their findings in a written form, students might elaborate on these during short oral presentations. These oral presentations are usually conducted asynchronously to be shared on the Blackboard Learn Ultra platform. There they can be viewed and commented on by fellow classmates, and evaluated by the instructor, as they form part of the overall grade ascribed to their assignments.

Even though variations across programmes of study exist, the approximate time for an individual assignment preparation is approximately 20 hours, for a group assignment preparation is approximately 15 hours and for preparing an oral presentation is approximately 5 hours.

When written assignments are submitted, these are automatically checked through Turnitin for plagiarism through performing a similarity check in available databases. Instructors may use also Turnitin as a pedagogical tool to help students improve the final draft of their assignment before the submission on the Blackboard Learn Ultra platform. Flags for instances of similarity constitute opportunities for formative feedback and opportunities for revision during the writing process.

Instructors proceed promptly (within 15 days at the latest) in providing the assignment grade as well as detailed feedback that the student needs to take into consideration in a formative mode of assessment for his/her better preparation of the final exam. Feedback can be given either on an individual basis (especially for individual assignments), on a group basis (e.g., in the case of group assignments) or a whole class basis.

Blackboard analytics are also helpful for an evidence-based approach to teaching and learning because they provide instructors greater insight into the factors that affect their students' performance. Analytics also provide a snapshot of what students know, what they should know and what can be done to meet students' academic needs.

During the semester, students are requested to work both individually and in groups in order to conduct their self-assessment and interactive exercises/activities, which are described in detail in the Study Guide of each course on the platform and are presented on a weekly basis. Three to five of such interactive activities/exercises are graded by the instructor (allocated a percentage of 10-15%). This element of the course further allows the students

to engage in asynchronous interactive learning at three levels presented in the respective section above (approximate time for activities/exercises preparation is estimated at 30 hours).

#### **e. Final exams**

After the 13-week learning period is completed, students take online the final exam for each of their courses (allocated percentage at 50%). The final exam assesses in a comprehensive way the level at which students have acquired the theoretical knowledge covered in the course, as well as the degree to which they have developed the skills in critical analysis aimed at by the course (approximate time for exam preparation 50 hours).

For the online/e-proctoring implementation of the final exams of E-Learning courses, the **Proctorio** software is used. This tool allows the students to undertake their exams in a proctored environment. Before starting the exam, the students are asked to use their University IDs to identify themselves. Exam recorded videos are stored on GDPR compliant Amazon Web Services (AWS Servers) and are automatically deleted every one (1) month. Up until students have submitted their final answers, should the instructor chooses, the software 'locks' their computer, not allowing them to perform any other actions on their PCs, other than their final examination, until they have submitted their final answers. The software uses the camera and microphone of the student's PC to monitor their movements, sounds, conversations, etc. and produces reports of student activity at the time of the examination. If potential transgressions are detected by the software, the instructor is alerted accordingly (i.e., the software flags specific snapshots and then the instructor when reviewing the recording can view those points more cautiously). The instructor, who is the only one with access to the recording, can access the video to review the reasons for a high alert. If deemed necessary, the student is interviewed and explanations for the alert are requested. If the information is not sufficient, further actions are taken based on the University's regulation on academic dishonesty. The University policy on penalties related to academic dishonesty is presented on instructors' Course Outlines for each course.

A video presentation of the semester delivery of a typical E-Learning course appears here:

 [MA Ed Sciences SpecialandInclusive DL video.mp4](#)

### **7. Student assessment in E-Learning courses:**

The Study Guides provided at the beginning of the semester contain specific instructions, resource guidance, rubrics for grading, assigned grade value for graded activities, and timelines. Students prepare and deliver their work, including the final exam, aiming to accumulate a grade of at least 60% to pass an undergraduate class, or 70% to pass a graduate class. The grading system of E-Learning courses according to EUC regulations appears in the table that follows:

BACHELOR's DEGREES (UNDERGRADUATE PROGRAMMES)				MASTER's DEGREES (POSTGRADUATE PROGRAMMES)			
Grade	Description	ECTS	Percentage	Grade	Description	ECTS	Percentage
A	Excellent	4.0	90+	A	Excellent	4.0	90+
B+	Very Good	3.5	85-89	B+	Very Good	3.5	85-89
B	Good	3.0	80-84	B	Good	3.0	80-84
C+	Fairly Good	2.5	75-79	C+	Fairly Good	2.5	75-79
C	Average	2.0	70-74	C	Average	2.0	70-74
D+	Below Average	1.5	65-69	D+	Below Average	0	
D	Poor	1.0	60-64	D	Poor	0	
F	Failure	0		F	Failure	0	
I	Incomplete	0		I	Incomplete	0	
W	Withdrawal	0		W	Withdrawal	0	
P	Pass	0		P	Pass	0	
AU	Attendance	0		AU	Attendance	0	
TR	Course from transfer	0		TR	Course from transfer	0	

For every week the objectives and learning outcomes are clearly stated in all Study Guides, allowing students to self-assess progress by reflecting on their grasp of target concepts and knowledge. Based on each assignment specific criteria, an indicative grading rubric is included in the Study Guides. An example of a rubric for a group research paper in a research methodology course appears below:

Group Assignment Evaluation	Criterion	Maximum points possible	Points Earned
<b>Names:</b>			
<b>Literature review and theoretical framework</b>	<ul style="list-style-type: none"> <li>adequate presentation of basic theoretical tools</li> <li>adequate presentation of local and international literature on the topic</li> <li>presentation of researcher's epistemological paradigm</li> <li>justification of necessity and importance of study</li> </ul>	4	
<b>Methodology</b>	Justified presentation and bibliographic documentation of the methodological choices concerning all parts of the methodological design: <ul style="list-style-type: none"> <li>appropriate research problem statement and research questions</li> <li>data collection methods</li> <li>participant profile</li> <li>sampling and recruitment method</li> <li>data analysis method</li> <li>data collection duration</li> <li>ethics issues</li> <li>validity and reliability strategies</li> </ul>	8	

<b>Analysis-interpretation</b>	<ul style="list-style-type: none"> <li>adequate interpretation and presentation of the findings</li> <li>with documentation with original excerpts from the data, and</li> <li>documentation from the literature</li> </ul>	8	
<b>Conclusions</b>	<ul style="list-style-type: none"> <li>link of basic conclusions to the literature</li> <li>comprehensive discussion of basic conclusions</li> </ul>	3	
<b>General</b>	<ul style="list-style-type: none"> <li>proficient use of language</li> <li>appropriate use of APA</li> <li>general presentation-appearance of the work</li> </ul>	2	
<b>Total points</b>		<b>25</b>	

### **8. Programmes' quality assurance**

In order to improve the learning experience for the students, EUC has established a Standing Committee under the University's Committee of Internal Quality Assurance (C.I.Q.A.) named the "Pedagogical Planning of E-Learning Programmes of Study Standing Committee". The Committee is involved in all internal quality assurance procedures and decisions related to the University's E-Learning programmes of study. The Committee's aim is to improve the learning experience of E-Learning students through its active and qualitative support of the University's E-Learning programmes of study and is responsible for supporting Schools in:

- monitoring and evaluating the existing E-Learning programmes of study
- the pedagogical planning of new E-Learning programmes of study
- the design and evaluation of educational material for E-Learning programmes of study
- the support and feedback processes to the students
- the pedagogical use of technology, internet and digital information
- the technical training and support of the instructors of E-Learning programmes of study
- the interaction between academic staff and students in the E-Learning programmes of study.

The composition of the Pedagogical Planning of E-Learning Programmes of Study Standing Committee for the academic years 2022-2024 is the following:

<i>Members: School representatives</i>	
<i>School of Humanities, Social and Education Sciences</i>	Dr. Constantina Demetriou, Assistant Professor (Psychology, B.Sc.)
	Dr. James Mackay, Associate Professor (English Studies, B.A.)
	Dr. Georgia Petroudi, Associate Professor (Music, B.A.)
	Dr. Monica Shiakou, Associate Professor (Child and Adolescence Mental Health, M.Sc.)
	Dr. Maria Papazachariou-Christoforou, Assistant Professor (Music, M.Mus)
	Dr. Constadina Charalambous, Associate Professor (Education Sciences: Special and Inclusive Education, M.A.)
	Dr. Chrystalla Papademetri-Kachrimani, Assistant Professor (Education Sciences)



	Dr. Christos Kassimeris, Professor (Public Administration, M.P.A.)
	Dr. Panos Christodoulou, Assistant Professor (Hellenic Studies, M.A.)
	Dr. Nicos Drosos, Assistant Professor (Career Guidance and Counselling, M.A.)
<i>School of Sciences</i>	Dr. Yianna Danidou, Assistant Professor (Cybersecurity, M.Sc.)
	Dr. Konstantinos Giannakou, Assistant Professor (Public Health, M.Sc.)
	Dr. Marianna Christodoulou-Devledian, Lecturer (Speech Language Pathology, M.Sc.)
	Dr. Athanasios Metaxas, Assistant Professor (Drug Biosciences and Pharmaceutical Development, M.Sc.)
<i>School of Business Administration</i>	Dr. Christakis Sourouklis, Assistant Professor (Business Studies, B.B.A.)
	Dr. Lycourgos Hadjiphanis, Assistant Professor (Business Administration, M.B.A.)
<i>School of Medicine</i>	Dr. Violetta Raffay, Assistant Professor (Medical Education, M.Sc.)
<i>School of Law</i>	Dr. George Chloupis, Assistant Professor (Criminal Law, L.L.M.)
	Dr. Charalampos Stamelos, Lecturer (International Commercial Law and Public Law, L.L.M.)
<i>Ex-officio Members:</i>	
<i>Director of Distance Education Unit</i>	Dr. Paraskevi Chatzipanagiotou, Assistant Professor
<i>Chair of Digitally Enhanced Learning (D.e.L.) Ad-Hoc Committee</i>	Dr. Loucas Louca, Professor
<i>Chair of Faculty Professional Development Standing Committee</i>	Dr. Louiza Voniati, Associate Professor

*EUC E-Learning Programmes of Study:  
Educational Principles, Teaching Philosophy and  
Methodology*

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