Module Layout
ΧΜΠ522: Fossil Fuels and Air Pollution

Faculty	*Code*	*Faculty of Pure and Applied Sciences*		
Programme of Study	*ΧΜΠ*	*Sustainable Environmental Engineering*		
Module	*ΧΜΠ522*	*Fossil Fuels and Air Pollution*		
Level of Study	**Undergraduate**	**Graduate**		
		Master	**Doctoral**	
		X		
Language of Instruction	Greek			
Mode of Delivery	Distance			
Module Type	**Required**	**Electives**		
	X			
Number of Group Consulting Meetings	***Total***	***Physical Presence***	***Online***	
	13	**0**	**13**	
Number of Assignments	**1**			
Final Grade Calculation	**Assignments**	**Weekly Activities**	**Final Exam**	
	30 **%**	*10* **%**	*60* **%**	
Number of European Credit Transfer System (ECTS)	*10*			

Module Description

The proposed course aims to study the procedures applied in the oil and gas industry. In particular, the basic elements and processes related to the formation of hydrocarbons, exploration, production and the downstream sectors of the oil and gas industry are studied. The course covers oil formation and trapping, geological exploration methods, drilling, appraisal and production. In addition, it covers the fundamentals of natural gas processing, crude oil refining, and petrochemical production. It also includes the challenges of distribution and organization in this sector while analyzing the environmental problems associated with the oil and gas sector and the alternative fuels available today. Furthermore, it is analyzing issues related to air pollution and possible methods and technology to minimize its environmental impacts. In summary, the course provides the student with specific knowledge of geology, rock and mineral formation, the technologies involved in the oil and gas sector, and the operating processes of the industry.

Pre-requisite Modules	
Not applicable	

Co-requisite Modules	
Not applicable	

Grading Scheme

Assessment Method	***Percentage on Final Grade***	***Workload***	
		Hours	***ECTS***
Weekly Study *13 weeks * ~11 study hours*		*140-160*	*4.5*
Weekly Interactive Activities *13 weeks * ~1 hour of work*	*10%*	*~13*	*0.5*
Assignment	*30 %*	*80 - 100*	*5.0*
Final/Repeat Examination	*60 %*	*3*	*--*
Total	**100%**	*250-300*	*10*

Grading Rules and Assessment methods

- Students are evaluated with 10, if they earn 100% of the possible grade.
- Students are evaluated with 9, if they earn 90% of the possible grade, I.e. 90%*10=9, etc.
- Passing rate
  - 50% of the Assignment
  - 50% of the Interactive Activities
  - Students are allowed to participate in the final exam of a Module if they have overall earned the minimum grade (≥ 50 %) in both their Assignment and Interactive Activities
  - 50% of the Final exam

If a student earns a grade with decimal points, then it is rounded to the nearest half unit.