Title:	Air Pollution		
Code number:	209KEY	**Type:**	Optional Compulsory
Level:	Undergraduate		
Year:	3	**Semester:**	F
ECTS Units:	5	**Teaching Units:**	3
Lecturer(s):	Pilinis, Christodoulos		
Content outline and weekly schedule:	1. Introduction- The Earth's Atmosphere 2. Effects of Air Pollution – Major Sources 3. Structure of the Stratosphere – Depletion of Stratospheric Ozone the role of CFCs 4. PM in the atmosphere, Size distributions, chemical and optical properties of atmospheric aerosols 5. Meteorology and Air pollution interactions 6. Inversion, winds, fronts, stability 7. Atmospheric dispersion in the atmosphere – Gauss equations 8. Exercises on atmospheric dispersion 9. Exercises on atmospheric dispersion 10. Wet and dry deposition 11. Atmospheric chemicals (Sources-reactions-transport-sinks) 12. Control of gaseous pollutants in the atmosphere 13. Control of atmospheric particulate matter		
Learning Outcomes:	Basic knowledge of air pollution principles.		
Prerequisites:	-		
Recommended Reading:	**Lecture notes:**	-	
	Basic textbooks:	Γεντεκάκης Ιωάννης (2010) Ατμοσφαιρική Ρύπανση – επιπτώσεις, έλεγχος, εναλλακτικές τεχνολογίες. Εκδόσεις Κλειδάριθμος, Αθήνα	
	Additional References:	• Λαζαρίδης Μ. , 2005 «Ατμοσφαιρική Ρύπανση με Στοιχεία Μετεωρολογίας», Εκδόσεις Τζιόλα, Αθήνα • Seinfeld, J. H. and Pandis, S. N., 1998, "Atmospheric chemistry and physics - from air pollution to climate change", Wiley, New York. ISBN: 0471178160 • Finlayson-Pitts, B. J. & Pitts, J. N., 1999, "Chemistry of the Upper and Lower Atmosphere : Theory, Experiments and Applications", Academic Press, New York, ISBN: 012257060X	
	Internet links:	-	
Learning Activities and Teaching Methods:	**Lectures (hours/week):**		3
	Practicals-Tutorials (hours/week):		During Lectures
	Other learning activities:		-

Assessment/Grading:	Final exam
Instruction Language:	Greek
Mode of delivery:	Face-to-Face