

ENST 3730 - Air Quality

Fall 2026 Syllabus, Section 01, CRN 43541,

Credit hours: 3

Instructor

Tamara Kerr-Sahli

Part-Time Faculty

Masters, Analytical Chemistry, Youngstown State University, 1995

Bachelors, Chemistry, Thiel College, 1981

Certified Safety Professional – CSP-38706

Certified Instructional Trainer – CIT-13921

Certified Hazardous Materials Manager – CHMM-16511

HAZWOPER/HAZMAT Trainer – 120605

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Fall 2026 Office Hours: By Appointment Only



Course Description

3730. Air Quality. Sources, dispersions, consequences and abatement of air pollutants emanating from industry and transportation. Topics also include the history, legislation, standards and economics of air pollution. Prereq.: CHEM 1515. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Air Pollution Science	Phalen and Phalen	978-0-7637-8044-9

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapter 1	Introduction to Air Pollution Science	
8/31	Chapter 2	Sources and Emissions of Air Pollutants	
9/7	Chapter 3	Important Properties of Air Pollutants	
9/14	Chapter 4	Sampling and Analysis for Health Assessment	
9/21	Chapter 5	Exam #1 Visibilty, Climate, and the Ozone Layer	
9/28	Chapter 6	Regulation and Abatement of Air Pollutants	
10/5	Chapter 7	Human Exposures to Air Pollution	
10/12	Chapter 8	Effects on Human Health	
10/19	Chapter 10	Exam #2 Epidemiology and Air Pollution	
10/26	Chapter 11	Risk Assessment	

11/2		Control of Motor Vehicles Emissions and Stationary Sources
11/9		Exam #3
11/16		No Class
11/23		Indoor Air Quality
11/30	Chapter 12	Ethical Considerations and How They Apply to Air Pollution
12/7		Comprehensive Final Exam

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.