

# APS 411

## Topics in Atmospheric and Planetary Sciences: Air Pollution and Health

### Course Description

Course participants will be able to identify elements of air pollution control, their impact on human health and management of ambient air quality.

Topics covered:

- History of air pollution control
- Health and environmental effects of air pollution
- Transport and dispersion of air pollutants
- Ambient air quality monitoring
- Emission inventories
- Laws and regulations
- Control of emissions from stationary and mobile sources
- Pollution prevention
- Respiratory and Cardiac Risk of Air Pollution
- Assessment of Respiratory and Cardiac Impact of Air Pollution
- Pollution prevention and Environmental Justice

### Who Can Take Course?

Sophomore, junior, and senior students.

**Course Reg. #**  
27932

**Semester:**  
Fall 2023

**Days and Times:**  
Monday, Wednesday  
and Friday  
9:00-9:50 AM

**Instructors:**  
Dr. Ayodele Akinremi  
Dept. of Physical Therapy

Dr. Ruben Delgado  
Dept. of Atmospheric and  
Planetary Sciences

### Why Take This Course?

This is the first of special topic courses, beginning in Fall 2023, to provide academic and hands-on experience in atmospheric science, air quality, public health and environmental justice.

The special topics series will provide students knowledge for certification in air quality management. Courses in:

- Air Pollution and Health
- Ambient Air Monitoring
- Remote Sensing of the Environment
- Environmental Justice

Interdisciplinary Sponsored Internships and Research Opportunities:

VA DEQ, US EPA,  
NASA, and NOAA

Strong academic foundation, and opportunities for graduate fellowships and scholarships for students interested in graduate degrees (Masters and Doctoral).