Air Pollution

AP3050

Lectured by Prof. Neng-Huei Lin (林能暉) and Prof. Guey-Rong Sheu (許桂榮)
Time: 13:00-15:00 Wed, 13:00-14:00 Thu.

This is an introductory course to provide sophomore and above a basic knowledge on the history, theory, observation, measurement, regulation of air pollution, and its link with governmental policy and public concerns. In-class lectures, intensive assignments and discussions, and, possibly, field trip will be given. The contents will cover the following topics:

0. Introduction
1. History of air pollution
2. Background chemistry and physics
3. Urban air pollution
4. Ozone depletion
5. Acid deposition
6. Air toxics
7. Atmospheric particles
8. Air pollution meteorology
9. Air quality and regulation
10. Air quality measurements – In-situ and remote sensing techniques
11. Air pollution modeling
12. Climate change, zero carbon policy and air pollution control

Textbook:

1. Air Pollution and Global Warming, M. Z. Jacobson, 2nd edition, 2012.
2. Air Quality, T. Godish, W. T. Davis and J. S. Fu, 5th edition, 2014.

Score:

1. 6-8 Quizzes and/or assignments 60%
2. Discussions and reports 40% (including 10% in-class discussion and performance)

All class materials including assignments and class notes can be found on website:
http://aerosol.atm.ncu.edu.tw/