CE 341
Introduction to Environmental Engineering
AIR : SPRING 2009

Instructor:  Dr. Tom Jobson, 302 Dana Hall, email: tjobson@wsu.edu
Office Hours:  Monday  4-5, Tuesday  4-5

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Textbook:  Masters & Ela, Environmental Engineering and Science 3\textsuperscript{rd} Edition

Website:  http://pas.ce.wsu.edu

Class Goals and Objectives
The main objectives are:
• to provide an overview of the more common forms of air pollution and their impact on the environment
• to introduce the fundamental principals governing the fate and transport of pollutants
• to introduce environmental engineering terminology
• to provide a foundation for the continuation to a more theoretical and applied aspects of air pollution treatment processes

Class Structure
Please attend all lectures.  Much of the information conveyed in the course is from lectures and is not necessarily going to be available in the book. You are expected to complete the reading assignments prior to class. You will be responsible for understanding the materials covered in the reading assignments, class handouts, lectures, and homework assignments.

Homework Assignments
• Due dates : homework is due one week after assigned, to be turned in at the beginning of class at the front desk.
• Late Policy : no homework will be accepted without an official excuse.
• Homework will be graded on a 100 point basis.
• All homework must be handed in on green engineering paper. The pages should be numbered and stapled together. Use only one side of the paper.
• Present solutions in an orderly format, showing all steps, equations, and units. Draw a box around your answer.
• Collaboration and the honor system: you are expected to complete homework assignments on your own. Discussing general aspects of a homework problem with classmates is acceptable. Copying homework problems from classmates is not acceptable and a violation of the honor system. Violations will be referred to Student Judicial Affairs.

Exams
There will be 2 air exams each testing the covered air section material. Exam format will be a combination of short answer questions and numerical questions similar to the homework.

Grading for Air Section
Homework (5 assignments): 50%
Test 1: 25%
Test 2: 25%

Cheating policy: Cheating is not tolerated. Anyone caught cheating will be asked to leave the class immediately and will be given an F in the course.

**Class Participation**
Active class participation is welcomed and essential to making this class a success. Class participation will be considered in borderline grade cases.

Think about what is being said

ASK QUESTIONS

**AIR TOPICS**

**Global Atmospheric Change (Chapter 8)**
  - Structure and Composition of the Atmosphere
  - Global Temperature & Energy Balance
  - The Greenhouse Effect
  - Sources of Greenhouse Gases
  - Radiative Forcing of Climate
  - Global Warming Potential
  - Stabilizing Greenhouse Gases
  - Climate Change Skeptics

**Air Pollution (Chapter 7)**
  - Criteria Air Pollutants & Air Toxics
  - Photochemical Smog
  - Pollution Control Devices
    - Vehicles
    - Stationary Sources
  - Gaussian Plume Model
  - Box Modeling