**MODL 301: Air Pollution Dispersion Models**

**AERMOD**

**Agenda for 5 Day Course**

In addition to all the files needed to run the AERMOD model and its preprocessors, the students will be provided related materials. These include user’s guides, model formulation documents (when available), implementation guides, etc. These documents are found in the “hands-on” directory under each relevant model or preprocessor (note: all of these documents and more can be found on the EPA SCRAM website under Dispersion Modeling; just google epa scram) Although not required, if the students have any time prior to the class they can begin to become familiar with the user’s guides in particular the tables that describe the PATHWAYS, KEYWORDS, SECONDARY KEYWORDS & PARAMETERS that define the model options and inform the model about the input data to be used. A glossary of terms will also been provided for students to reference during the class. For all the details of the model formulations, the AERMOD model formulation document (aermod\_mfd.pdf) is the place to go. The course will stick primarily to concepts in covering the model formulations and use equations sparingly. The course has been designed for 3 full days and 2 half days. The agenda is listed below.

**Day 1**

1:00 PM: Introductions, Course Objectives, Logistics and Schedule

1:45 PM: AERMOD fundamentals Part 1 (lecture)

2:45 PM: -Break-

3:00 PM: General introduction to running AERMOD

3:45 PM: In-Class Exercise 1

4:30 PM: Adjourn

**DAY 2**

8:30 AM: Introduction to Hands-on activities

9:15 AM: AERMET (Part 1 - lecture)

10:00 AM: -Break-

10:15 AM: AERSURFACE (lecture)

11:15 AM: AERSURFACE (hands-on)

12:00 PM: Lunch

1:00 PM: AERMINUTE (lecture)

1:30 PM: AERMINUTE (hands-on)

2:15 PM: -Break-

2:30 PM: AERMET (Part II Lecture)

3:15 PM: AERMET (Hands-on)

4:30 PM: Adjourn

**DAY 3**

8:30 AM: In-Class Exercise 2

10:00 AM: -Break-

10:15 AM: AERMOD Fundamentals Part 2 (Lecture)

11:15 AM: AERMAP (lecture)

11:45 AM: AERMAP (hands-on)

12:15 PM: Lunch

1:15 PM: BPIPPRM (Building Downwash Lecture)

2:00 PM: BPIPPRM (Hands-on)

2:45 PM: -Break-

3:00 PM: AERMOD Setup (lecture)

4:30 PM: Adjourn

**DAY 4**

8:30 AM: AERMOD (hands-on)

10:00 AM: -Break-

10:45 AM: AERMOD (hands-on cont.)

12:00 PM: Lunch

1:00 PM: In-Class Exercise 3

1:45 PM: In-Class Exercise 4

2:30 PM: -Break-

2:45 PM: In-Class Exercise 5

4:00 PM: Adjourn

**DAY 5**

8:30 AM: AERSCREEN Overview

9:45 AM: BREAK

10:00 AM: AERSCREEN hands-on

12:00 AM: Adjourn