

Teaching Plan for ES 460 (Introduction to Air Pollution)

Instructor: David DuBois

Semester: Fall 2020

ES 460 (Introduction to Air Pollution): An introduction to the physics and chemistry of tropospheric air pollution including sources of air pollution, local and long-range transport, instrumentation, regulatory requirements, control technology.

ES 460 is a three-credit course that meets twice per week for lecture (T/TH 1:30-2:45 pm). The lectures are scheduled to meet in Gerald Thomas Hall 360. We typically have 6 to 10 students in the class. I intent to teach the course with a similar content as in prior semesters. We typically devote one or two meeting times for demonstrating air quality and meteorological instrumentation outdoors. Students can work individually or in teams perform simple hands-on experiments that take the form as class projects. The following exceptions will be made for the implementation of safety practices to help prevent and slow the spread of COVID-19 in the instructional environment.

1. Lectures. Lecture activities and lecture exams will be planned for online dissemination using Zoom. That is, we will not meet in person in Gerald Thomas 360. This practice will eliminate student presence in the building and its vicinity during our lecture times.
2. Student Projects. Discrete instructions will be provided in the syllabus and practiced during the semester, as per CDC guidelines, to prevent COVID-19 transmission during instrumentation lectures and student project meetings. These instructions will include 1) self-monitoring using guidelines from the aggie wellness center; 2) 'remaining at home if ill' policy; 3) wearing an approved facemask when on campus if such a directive remains in effect; 4) maintaining at least six feet social distancing as work duties permit; 5) cleaning and disinfecting countertops, common areas, and shared equipment during and after use; and 6) and practicing frequent hand washing.

For the instrumentation meetings, I will reduce student density of this class by 50% by staggering the sessions at Skeen Hall or other campus site to accommodate one-half of the students from 1:30 to 2:00 pm, and the other half from 2:15 to 2:45 pm. With this measure, I expect no more than 5 students per session while maintaining a minimum of six feet social distancing.

If COVID-19 restrictions prohibit meeting in person, the instrumentation meetings will be held online where I will run the air quality and meteorological instruments and the students will analyze and interpret the data for their projects. They may work in groups or individually using Zoom meetings.

3. Contact tracing: For contract tracing, students will immediately notify me if they suspect they are ill (fever in excess of 100.4°F, cough, or shortness of breath), or if they are notified that they may have potentially been exposed to COVID-19. Once I learn that a student may have a virus or has been tested as presumptively positive, I will work with the student promptly to isolate them so that they do not transmit it further. I will then work with that student directly to understand who they have come in contact with. Any student who has been infected will be asked about their contacts, and then

those contacts are approached. The affected students will call their physician, the NM Department of Health COVID Hotline, or the student health center and, if not already done so, will arrange for a test. In extreme cases, they will call 911. The affected student will return to class only if they have been tested and only after a negative test, or will self-quarantine for 14 days if the test is positive. I will maintain email and telephone number of students and their contacts, and keep daily attendance. I will subsequently notify Dr. Rolston St. Hilaire (Department Head) if a student is ill, if positive test results are obtained, and all of the persons with whom the student has had in-person contact.