

Teaching Plan for SOIL 477/477L (Environmental Soil Physics and Lab)

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Semester: Fall 2020

SOIL 477/477L (Environmental Soil Physics and Lab): A description of the physical characteristics of porous media including soil. Examination of processes describing the transport of water, chemicals, heat and gases through porous media with application to environmental quality, waste management, and crop production. For 477L, concurrent enrollment with soil 477 recommended. Hands on experience with techniques for characterizing soil physical properties such as particle size distribution, bulk density, water retention, hydraulic conductivity and solute transport. Demonstrations of field and laboratory techniques for measuring moisture content, soil water potential, gas/air flow and thermal conductivity. **SOIL 477** is a 3-credit course that meets twice per week for lecture (T/TH 12:20-2:00 pm), and **477L** is 1 cr and meets once per week for lab (F 230-430 pm). The lectures are scheduled to meet in Skeen Hall N120 and the labs are scheduled to meet in Skeen Hall W230A. We typically have 8 to 12 students in the class. I intent to teach the course with a similar content as in prior semesters. 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. Lectures and exams were face to face and online during Fall 2019. During Fall 2020, instructions will be completely online using Zoom. This practice will eliminate student presence in the building and its vicinity during our lecture times.
2. Labs. We will not meet in person in Skeen W230 unless we are asked to do so. Firstly, I will change in-person lab meetings to online virtual (Zoom) lab meetings for all labs and assignments. Videos will be made or existing videos will be used for the lab. Students will be given options to use their/provided data to complete assignments. However, in case of face to face, maximum four students will be allowed in the lab at a time. Discrete instructions will be provided in the syllabus and practiced during the semester, as per CDC guidelines, to prevent COVID-19 transmission during lab 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 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.
3. Contact tracing: Since class is completely online, there will not be any need for contact tracing. However, if we are asked to do face to face classes also then for contract tracing, student will immediately notify me if they suspect they are ill (fever in excess of 100.4 degrees 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. 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 of students and their contacts, and keep daily attendance. I will subsequently notify Department Head and Associate Dean Academics 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. For more information please go to <https://www.webmd.com/lung/news/20200504/what-is-contact-tracing-and-how-does-it-work#1>