<u>Course</u>: CEEG 340 Environmental Engineering Laboratory

<u>Lab Location:</u> Room 364 Breakiron Engineering Building

<u>Time.</u> Tuesdays, 8:00 AM, 10:00 AM

<u>Instructors:</u> Deborah Sills

215 Dana

Office Hours: Mon 5–7pm, Tues 3–4pm, Wed 6–8pm

By appointment, or stop by my office.

<u>Laboratory Objectives.</u> During the semester, laboratory periods will be used to perform experiments that reinforce and/or illustrate concepts from the class. The period will also be used for two field trips, as well as time to work on problem sets. *You should bring your CEEG* 340 homework with you to every lab session, in case there's "down time" for you to work on homework.

<u>Laboratory Grade</u>. Your grades for lab will consist of lab assignments, as well as attendance and participation. There will not be a separate grade for the lab section itself. Rather, the lab contributes a percentage of your overall grade for CEEG 340.

<u>Laboratory Assignments</u>. Most labs will be accompanied by an assignment. Since this course is not a W2 we will focus on creating high quality figures and analyzing data.

Laboratory assignments are due at the start of your lab period on the assigned date, and the same late work policy as employed in the lecture applies to this lab. Lab assignments will be submitted electronically. It is your responsibility to read and follow instructions described in each lab hand-out.

Lab assignments will be individual assignments. You are expected to hand in independent work. While it is obvious that groups working together in the lab will share the same data, your analysis, presentation, and interpretation of the data should be your own. If you collaborate with a group member, such as discussing the results and what they mean, you should then put that into your own words for the assignment. Also, when turning in your assignment, list the students with whom you collaborated or discussed the assignment. The Honor Code and academic responsibility apply to the lab, just as they do to the lecture portion of the course.

<u>Laboratory Attendance</u>. Attendance in laboratory is mandatory, even when it's designated as a homework work session. If you must miss a lab due to an extenuating circumstance or official event, please contact me as early as possible to arrange a make-up lab or assignment. You are responsible for the material covered during that lab period, as quiz and exam questions may be derived from the lab material.

<u>Schedule.</u> Below is a tentative schedule for the semester's labs.

Session	LAB TOPIC
1 (8/27)	Safety & Laboratory Measurements and Procedures — (Assignment Due 9/3)
2 (9/3)	Measuring water quality for the Lewisburg Neighborhood Corporations (LNC) (Assignment Due 9/10)
3 (9/10)	Reaction Kinetics of O ₂ uptake— (Assignment Due 9/17)
4 (9/17)	Modeling Environmental Systems as Reactors 1— (Assignment Due before you leave lab)
5 (9/24)	Modeling Environmental Systems as Reactors 2— (Assignment Due 10/1)
6 (10/1)	Problem solving session
7 (10/8)	Water Treatment Processes — (Assignment due 10/22)
10/15	No Lab: Fall Break
8 (10/22)	Field Trip: Water Treatment Plant Tour—Meet in front of Breakiron (Assignment due 10/29)
9 (10/29)	Wastewater Analyses 1—
10 (11/5)	Wastewater Analyses 2—(Assignment due 11/12)
11 (11/12)	Field Trip: Wastewater Plant Tour— <i>Meet in front of Breakiron</i> (Assignment due 11/19)
12 (11/19)	Using low-cost sensors to measure particulate air pollution (Assignment Due 12/3)
11/26	No Lab: Thanksgiving
13 (12/3)	Using low-cost sensors to measure particulate air pollution (Assignment—Presentations due 12/10)
14 (12/10)	Air Pollution Presentations & Course Evaluations