***University of Houston EAS teaching tips for lab classes***

This guide is intended to help you be a better teaching assistant. Each lab class may be run differently depending on the expectations of the professor in charge of the lab. The outline below is to be used in Physical Geology labs but much of the advice is generic to any lab class.

***Outline of a typical laboratory session***

1. Announcements
2. Collect assignments/or give short quiz
3. Return assignments with comments
4. Brief review of previous week and relationship to this session; goals for today
5. Introduce first exercise
6. Class does first exercise
7. Discuss exercise and introduce next exercise
8. Repeat 5,6,7 as needed
9. Summarize session and remind class of assignments for next week
10. Class helps straighten and clean lab

***Preparing for the class***

*Be a role model for your students*: As the teacher, you set the standard for behavior that students should follow. Thus, **you** are punctual, fair, consistent, and helpful; you come to class fully prepared to teach it; you return assignments and exams at the very next class meeting with constructive comments as well as grades; you make your high expectations clear and equally let students know that you are willing to help them reach the appropriate level of performance.

These traits will earn the respect of your students. They also enable you to demand punctuality; homework handed in on time, and real effort on *their* part. Not all will rise to your standard, but you’ve got a much better chance if you set the right tone from the very first day.

1. ***Prepare the lesson carefully*:** Meetings with the course coordinator and veteran colleagues will identify the goals for each lab session and outline activities to help reach those goals. You don’t have to create the activities on your own, but you do have to implement them, make them run smoothly, and manage time so that everything gets done as scheduled. Although a crude time outline will be discussed at our meetings, each class is different and some things will go faster than expected, others slower. *Time management is one of the more challenging parts of classroom supervision*. It takes practice to get it right; don’t be surprised if things at first go faster or slower than you anticipated.
2. ***Teach the class*:** In addition to preparing the sequence and timing of exercises, this also means assigning and grading homework, quizzes, and examinations; keeping accurate attendance records, etc. Everyone eventually develops his or her own classroom style, and what suits one person very well may not work for another. Still, there are a few basic do’s and don’ts:
3. **DO NOT** become your students’ friend. It certainly helps if your students like you (not all will, in any case), but too many novice instructors sacrifice educational goals by bending over backwards to befriend their students. Assuming that you are naturally a likeable person, your students will like you! It is more important that they respect you. Sadly, some can’t make the distinction between the grades they are earning and their feelings about you. Unfortunately, some of the students I like the most fail; some that I don’t like much earn A’s. As teachers, we must make the distinction between performance and personality, even if some of the students can’t.
4. **DO NOT LECTURE for long periods of time**: Lab is supposed to be a hands-on event, not a note-taking session. **DO** act as a facilitator, explaining just enough to get the class started on an exercise, answering procedural questions and gently prodding the group to work efficiently. **DO** summarize each exercise, engage the entire class in discussion, and proceed to the next exercise.
5. **A few helpful hints**

- *Learn your students’ names quickly* (and the correct pronunciation) so you can call on them and can tell quickly who is participating and who isn’t. [I ask my students to write their names in large letters on a sheet of paper and put it on the table in front of them. It usually takes me three weeks to know everyone. Some Geology 101 instructors take digital photos of their students to aid this process]

- *Write important announcements on the board in a place where they can stay throughout the class*. The entire class rarely shows up on time, and you can’t wait until the entire group assembles before beginning the lesson (indeed, starting on time helps decrease student lateness). But if a student doesn’t hear about an assignment, a quiz the next week, where and when to meet for a field trip, she/he will not necessarily get that information from a classmate. [I usually use the upper left side of the blackboard for important communications so that students coming late know where to look for them.]

- *Suggest that your students have a “lab buddy”*: Most students pair off, working with one or two others whom they know or feel comfortable with. Suggest that they share phone numbers or email addresses so they can get information should they miss a lab or can study together.

1. ***Housekeeping*:** Running an efficient laboratory course for several hundred students requires that the teaching labs be kept in proper working order. You and your students are the first line troops in lab maintenance. We can replace missing or broken materials, but you have to let your Head TA know what is needed. To keep the labs running smoothly:
2. ***Before each lab you should*** 
   1. Assemble whatever materials, specimens, or supplies you will need. If materials are in pre-assembled sets (as is the case with rocks and minerals), **check each set** for completeness.
   2. Make sure that microscopes, hotplates, balances, etc., are in working order, *and that you know how to use them!* Report any problems.
   3. Be sure that tabletops are clean, dry, and free from rock or mineral fragments and acid.
3. ***During the lab you should***
4. Put away materials when they are no longer needed
5. Clean up acid or water spills as soon as they happen
6. Replace any rock or mineral samples you have taken from the shelves at the side of the lab
7. ***At the end of the lab you should***
8. Take five minutes with your students to clean up (it won’t take that long). All specimens should go back in their sets, all scrap paper and food wrappers should be put in the garbage cans, all tables should be cleaned, wiped, and dried. **You** are responsible for the lab being in at least as good condition as when you started the class; ***you*** can do all the housekeeping if you really want to, but since the students have created the garbage, they should clean it.
9. Erase the blackboard, put away equipment and supplies that you have used.
10. Notify either the head TA or professor in charge of the course immediately if anything needs to be replaced or repaired.

***After the class***

Before the next lab, try to grade any work that your students have turned in (e.g., lab quiz, assignment or test). If you do this promptly, you will help the students perform better on their next lab. If you cannot grade all of the labs before the next assignment, go through some of them and find out how the students are doing. Then you discuss and correct common problems before they move on to new material. It is both a burden to you and the students to have a backlog of ungraded labs and assignments.

Be sure to input their grades in Blackboard Learn in a timely manner. Many students use this to follow their progress.

**COMMON PROBLEMS AND WAYS TO COPE WITH THEM**

Many problems arise during a semester, more than can be addressed here. Most are minor and can be handled easily, but some are important enough to merit discussion here. Our students’ complex social and financial situations have an impact on their attitudes toward school and their performance. In addition, each student is a unique individual with his/her own goals, talents, and academic abilities. Each student and problem must therefore be treated on an individual basis – with fairness and compassion while at the same time maintaining the EAS Department and UH’s reputation for academic integrity and rigor.

Therefore, there are only a few rigid rules, and some general guidelines. Use your common sense and best judgment in dealing with incidents. If you feel that a problem requires further help, contact Jinny Sisson or Dan Hauptvogel. Students’ personal crises are generally beyond our ability to help – if someone comes to you for this kind of help, be compassionate but suggest they utilize the Counseling and Psychological Services ([CAPS](http://www.uh.edu/caps/)) in the Student Service Center, Room 224. These are professional psychologists who are trained specifically to help our students.

**Some common student behaviors and how to deal with them:**

1. ***Student is habitually late for class***- Speak to the student to identify the problem and suggest remedies. Remind the student that important announcements, quizzes, review materials, introduction to new topics etc., typically happen in the first few minutes of the class and are critical to their doing well.
2. ***Student habitually leaves early*** *-* A student may have an appointment that requires her/him to leave early. Once is okay, not every week. Courtesy requires that you be informed at the beginning of the class that he/she will have to leave early. Some students do not know this; if they just disappear, discuss it with them in the next lab session.
   1. Notice if a student leaves class early on a regular basis and intervene to change this behavior. Job schedule is cited often as the reason for this behavior; point out that work and school are both important parts of their lives and they are responsible, as adults, for balancing the two.
3. ***Student misses more than three laboratory sessions*** *-* Speak to the student when they have missed two classes and remind them of the policy. Urge them (helpfully, and with sympathy) not to miss any more. Inform the lecturer of these students’ attendance problems.
4. ***Student misses an examination***
   1. and has a valid reason. Ask for them to provide proof (e.g. A doctor’s note or letter from another appropriate person is certainly acceptable). If this is the case, try to schedule a make-up exam.
   2. and does not have a valid reason. In nearly all cases, the response is simply to assign a grade of zero for the exam. If you feel that there are extenuating circumstances, you may offer a make-up exam but this can become very onerous.

**Inappropriate classroom/field trip behavior**

*Student is disruptive* - Draw the student aside and speak privately to him/her. Public confrontation raises defensive hackles because the student may feel embarrassed and may be more stubborn than if addressed quietly. Speak directly about the disruptive behavior and ask them firmly to stop. If the behavior continues, contact the faculty member in charge.

**Assignments**

1. *Student does not hand in assignments* 
   * *Set the tone at the first class*. Make it clear that work must be handed in on time in order for it to have educational value: it doesn’t make sense for an activity designed as an introduction to a topic to be handed in after the topic has been covered in class.
   * *Identify problems early*. Talk to students who don’t hand in an assignment the day it is due to find out why they haven’t done so. Some flexibility is necessary because there are valid reasons for not submitting work, but be fair by treating students uniformly
   * Some students will say they didn’t hand in an assignment because they didn’t do it. Catch this behavior quickly to change it. Tell students that they should try to do the work early enough to be able to ask you for help and still make the deadline. Those who start assignments ten minutes before they are due rarely make it on time.
   * *If the problem persists*. Discuss the matter again with the student and warn that class and homework participation points are being lost. If they tell you that they have no intention of doing the work (yes, some will actually say that) ask why they’re in the course in the first place. Suggest that they save themselves (and you) time and worry by dropping the course.
   * Inform the lecturer and coordinator of chronic offenders.
2. *Student attempts to submit assignments late* 
   * Remind the student of your rule about late assignments. I tend to be sympathetic but students must still hand in the assignment *before it is discussed in class.* Once we discuss an assignment in class, I will not accept a late copy from anyone. Try to have enough assignments so that you can drop the lowest grade; one missed assignment (zero) will therefore not seriously affect a student’s grade.

**Plagiarism and cheating**

All students are expected to uphold the standards of [academic honesty](http://www.uh.edu/provost/academic-affairs/policy-guidelines/honesty-policy/) as described in the UH Undergraduate catalogue. If they have any questions, here is a link to frequently asked questions ([FAQs](http://www.uh.edu/provost/academic-affairs/policy-guidelines/honesty-policy/student-faqs/))

This includes NO Electronic devices including cell phones during any lab unless you give permission to the students. You should not give blanket permission to use cell phones for the entire semester. Instead, we recommend you give permission for every lab you will let them use a phone. Many students have been caught cheating using cell phones to copy some else’s work or look up answers. If you find a student using any electronic device during lab, remind them to turn it off or put it in their backpack. If a student, routinely uses their phone without your permission, this is a violation of UH policy. Get your fellow TA to verify their behavior and tell the professor, as this is a possible violation of the UH academic honesty policy. If possible, find out if they are looking up information or taking photos of someone else’s work. They may not let you look at their phone, but ask politely.

If two students submit identical work, make copies or take pictures of the assignments for proof. Be sure you have discussed your policy for shared work before the assignment is due. This can be done at the beginning of the semester or before the lab begins. Remember, students often work together on assignments – that’s OK, but they should each write their reports separately. If allowed by the professor, they can submit group reports. Inform the lecturer and course coordinator; you discuss with the professor, the wisdom of reporting the student for formal disciplinary proceedings.

If a student cheats on an exam:

1. Inform students before the exam that you regard cheating very seriously and tell them in advance what the penalty will be. Although it isn’t always easy to do so, speak in a calm, matter-of-fact way without seeming to be expecting them to cheat.
2. If you think someone is cheating during the exam, give a general warning to the entire class.
3. If the cheating occurs, document the alleged violation. This is best done with another instructor or faculty member as a witness in case the student claims that you were mistaken. If a student has improper notes, try to confiscate them without getting into a physical confrontation.
4. Report the incident immediately to your course coordinator within 5 business days of when you notice the violation. They will then contact the EAS Departmental Hearing Officer. You may be asked to appear at the hearing to discuss the alleged violation.