TEACHING PHILOSOPHY
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Over the years it has become clear that it is important for students to have some idea about the teaching philosophy of the instructor if they are to do well in the course. This document is an attempt to lay out my instructional philosophies so that you may have a better idea of why I do things the way I do and how you can take advantage of them to do well in the course. Also included are suggestions as to how to do better in this course. Please read through this — I know it is long, but it will be of some value.

Each one of you is taking this course for a different reason. Most of you are taking it because it is a required course for your intended major. Often, this means that you may not be particularly interested in the material presented in the course because you do not yet understand the value of this material in your future endeavors. Be assured that you would not be asked to take this course if it was not felt to be important by those who are guiding you into your future.

Having said that, you should realize that — at least through high school — it is the function of the teacher to “make sure” you learn the material. Now, in college, the onus is upon you to learn the material; it is the function of the instructor to guide you through the process and evaluate whether you have actually learned the material. You have to want to learn the material, even if you do not yet know why. (On the other hand, does there HAVE to be a reason? Some things can be or should be learned simply for the sake of knowing them.)

(One of my favorite quotations is by Victor Weisskopf [1908-2002]: “People cannot learn by having information pressed into their brains. Knowledge has to be sucked into the brain, not pushed in.” You will come across a number of other quotations that I consider relevant in this course. They are there because they can make the point, perhaps, better than I alone can. Please take some time to read and understand them.)

Read. Read again. Understand. Reread. Make sure you understand what you have read. That includes this essay, your textbooks, the lab manual, exams, and all instructions you come across. (Listen to and follow all verbal instructions as well.) One of the biggest problems that I see students having is that they have not read and understood the material and yet they are trying to accomplish something. That just does not work. This course, by necessity, requires much reading; not everything can be given to you in a lecture. You can’t do lab work if you do not know what you are expected to do. (Lab work is not just about filling in a worksheet!) Again, it is up to you to do much of the work in this course.

This course is not about a grade. This course is about learning the material. However, if you learn the material, you will get a good grade. Many of you require a MINIMUM grade of C to get into your desired field of study. (Note that the C may not necessarily guarantee that you will get in; it just means that you have met the basic requirements.) Too many students simply aim for the C, when they should be aiming much higher. There seems to be a general feeling among students that science, and biology in particular, is hard; that no one can do well in it; that the biology department and its instructors delight in failing students. Yes, biology (or any subject, for that matter) can be hard, especially if you are not interested in it or do not seem to have a particular facility for it. That does not mean that you can not do well in it; it just means that you have to work harder to do well. And many people do do well in the course. As for the department not wanting anybody to succeed, well, that is simply not true. While some
instructors may be “harder” than others, because of their particular philosophy or teaching style, none revel in seeing a student fail.

(Related to this, there is a persistent rumor around campus that the Biology Department is on probation because it fails too many students. The Biology Department is not and never has been on “probation”, whatever that may mean. It is true that the average grade in the department is around a C, but so is the average grade of many departments. If you understand what an average is, then you should understand that there are also many grades above the C as well as below. And, if you know something about statistics, then you should realize that — related to normal distributions and bell-shaped curves — this is exactly what should be expected. C should be an average grade in any large population of students with varying levels of skill and preparation. So, the department is where it should be, and, while this may be disconcerting for some students, the department does not seem to be inflating grades just for the sake of reporting higher grade averages. Be careful from whom you get your information; they may have their own personal reasons for distributing inaccurate information.)

You should be aware that the average overall grade in this course tends to be C or C+, which, again, should be expected in most courses of this type. You should also be aware that while grades may be adjusted slightly at the end of the course (see the syllabus), an average course grade of C is never forced, especially by lowering any grades. In some cases over the years, the average course grade has been in the B range.

Since your course grade reflects how well you have learned the material, this means that your role is to work as hard as you can to learn the material. It is also your job to retain that material for use in any future courses and in your future occupational endeavors. And, importantly, it is up to you to learn the material simply because one of the reasons you are in college is to become an educated person.

It is my role to determine what material is important for you to know. It is my job to present this material to you in a clear and understandable manner. (Please let me know if that is not the case!) And, finally, it is my job to evaluate your mastery of the material, based on the standards that I have set for assigning letter grades.

As with any interpersonal interaction, there are bound to be times when your ideas and mine do not agree. Generally, that is not a problem. Feel free to discuss these differences with me. If it is a problem with the course, and you are not satisfied with my responses to your concerns, you may always seek guidance from others, beginning with the chairperson of the department.

Also, pay attention to what your advisor says. It is your responsibility to know what courses you need to take and other information, such as what grade you need to receive, but your advisor may be able to clarify how and where to get that information. Ignorance of this kind of information may set back your college career.

Each instructor has his or her own teaching style and techniques that are used to try to accomplish the goals of the course. I am no different in that regard. Some students seem to like the techniques I use, and others do not. That is just the nature of the beast. However, a brief explanation of those techniques that seem to cause the most trouble may alleviate some of the problems.
Course lecture material is presented electronically. Outlines of the presented material are available from the course web site, and it is required that you download those materials to make the course go more smoothly. Please note that these are OUTLINES of the material presented; they do not contain all the material presented in class. Therefore, it is important that you come to each class if you are to do well in the course. Note that, except for the first few classes (when the roster is being checked), attendance is generally not taken. As mentioned above, it is up to you to get the material, it is not up to me to force you to do that. Therefore, attendance does not play a direct role in grading. However, several things should be kept in mind. You will do better in this course if you come to class. This is because you will get an explanation for the outlines and not just the bare minimum amount of material. You will do better in class if you attend regularly, participate, and/or hear the answers to the questions of others. Occasionally, unannounced quizzes may be given during lectures. Missing these may affect your grade.

Don’t attend class just for the sake of being there. If you are not going to spend the time in class doing class-related work, then you might as well not come. Do not text in class. Do not use cell phones in class. (If there is a good reason for you to keep your phone on, such as a family emergency, go ahead; that will not be a problem.) Do not spend the time in class on a computer doing things not related to class (Facebook, Twitter, etc.). While I will generally ignore such activities on your part, should you choose to ignore what I have just said, there are times when they become distracting to other students or to me. At that point I may call upon you to stop what you are doing for the sake of the class. It is not personal, and it does not affect any grades, but please be aware of how disruptive those activities can be, both to your own studies and to those around you. If you really do not want to come to class and participate in your learning, please do not come.

Please avoid rude behavior. This would include having a conversation with classmates in class, but more commonly it involves getting up and leaving the classroom in a disruptive manner. If you know you will have to leave the class for some reason (perhaps you may think about using the restroom just before class), please sit near a door and leave as unobtrusively as possible.

And please try to be on time for class or lab. Occasionally, through no fault of your own, you may have to be late. No problem. But if you are consistently late, then it interferes with the class and your own learning experience. Plan accordingly.

You cannot learn the material simply by coming to class. You MUST spend some time outside of class studying the material. Studies have shown that do do well in a course a student should spend a minimum of three hours of studying for each hour of lecture. That means that you should be studying at least nine hours a week for this course. And this does not include lab time and lab studying. Yes, this is a lot of time, but you must make the commitment if you honestly care about your studies and your future.

One problem that many students have is that they have to work. Some students have a full-time job as well as taking classes. Some even try to work full-time and take a full credit load. In general, this does not work out. Something has to give, and that typically is study time, which adversely affects the grade. If you are not in a position to spend the time necessary in all of your course, you may need to reconsider how and why you are taking your courses. Seeing your advisor to help you in this regard is a good idea.
A typical request at the end of the course, usually right after the grades have been posted, is, “Can I do any extra credit to bring my grade up?” The answer is “NO”, so please do not ask. The reasons are simple. As has been said before, this course is about what you learn, not about the grade you get. While your grade is important, what you learn is even more important. If you do the work during the course as you should, then you should get a good grade. Asking for extra work to do when you cannot do the required work does not make sense. Also, if I were to give you extra credit, especially after the course is over, then I would have to offer it to everybody in the class, which is simply not possible.

If you are having difficulties in the course, don't be afraid to see me. Office hours are set aside by professors as a time when they are in their office primarily to see students. Often we instructors debate among ourselves why students simply don't come and take advantage of that time. Check the syllabus, both the summary handed out in class as well as the full syllabus on the course web page for my office hours. They are also posted outside my office (FLS 235). And take advantage of them.

Another possible way of doing better in class is to take advantage of tutors. The Biology Department has tutors available, as do other offices, such as OASIS, on campus. The earlier you start using these services if you need them, the sooner you will get better results.

Spelling and grammar count. (See the web page linked to from the class web site.) It is easy to dismiss matters like this by saying things like, “I've never been good at things like that,” but, like learning mathematics (I know, “I've never been good at that either!”), it just takes practice and perseverance. As I mentioned before, part of my job is to evaluate whether you have learned the material or not. If I can not understand what you are saying, then I can not tell whether you are correct in what you are saying. Science uses words in a very precise manner so that there is less chance for misunderstandings. One of the most common complaints about science being so hard to learn is that it is like learning a new language. And that is true. However, most of the problems I see in grading things like lab reports are not related to the science but to the misuse of common English. Try this: reread what you have written or, better yet, give it to someone else to read. See if it makes sense and is written properly. If it does not make sense, fix it. Rarely is anything ever done properly the first time through. Spend some time editing your work, even if it is only one simple sentence. The results will be worth it.

Learning begins with questioning, and questions come from many different places. In general, questions arise from not knowing something and questions arise from not understanding something. Both of these are common in this course. Don't be afraid to ask questions. In most cases I will have an answer for you. In those cases where I don't have an answer readily available I will try to get you an answer. (Nobody can know everything about a subject.) By asking questions in class you do several things: you get the answer to your question; you show that you are involved in the course; you help others who may be too reticent to ask questions themselves.

Having said this, there are times when I may not answer a question directly. This is generally the case in the laboratory portion of the course. The lab is a place where you learn to answer questions for yourself. That's what scientists do in labs, and you are in a lab course to learn about what scientists do and how they work. So, work on the problem for a while. If you do not come up with an answer on your own, then ask again. You will never leave without an answer; however, you just may have to work for it.
Do not cheat. Of course, that should go without saying. (Cheating does not help you learn the material, and it certainly won’t help you do well in the future.) You should be aware that cheating can lower your grade, make you fail the course, or even get you dismissed from the college. The college, and most instructors, take cheating very seriously. The student manual defines instances of cheating, including plagiarism. I usually deal with cheating in various ways; typically it involves the lowering of grades. You should read the information in the student manual for the college’s information about cheating. If the degree of cheating is large, then you may be brought before the Board of College Discipline which could lead to expulsion from the college.

The real problem comes in with the definition of cheating. Most of the time, this occurs in the lab, where students copy answers from each other. The excuse I usually get is, “But we worked on it together!” That may be the case, but remember this: you, as an individual, have to know the material and show to me that you know it. I can not tell this if you have the same answer as someone else. If you work together (collaborate) with someone, you may both agree on an answer, but it is important that you put that answer into your own words. In that way, you can be more confident that you know the material, and I can be more sure that you actually do know and understand the material.

Again, feel free to discuss any of the above comments with me. In that way, we can both understand each other better and help you do well in the course.

Good luck in this course and in your future endeavors.