**A Practical Guide
to Teaching Biology
at SWC**

by

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Introduction

Someone once suggested that there are no guarantees in life. In spite of that warning, we have one to offer you. “We guarantee that this guide contains examples of most big mistakes you can make related to teaching and employment. Furthermore, we have provided the best suggestions to avoid shooting both feet with one bullet.” The rest, as every tombstone should read, is up to you!

Section I: Welcome To SWC

Now That You’ve Met Your Dean

The Dean or Department Chairman gave you an adjunct faculty guide on *Policies and Procedures.* Read all of this information very carefully. These are the basic rules of employment at SWC.

Our Dean and Department Chairman have many years of experience handling all kinds of problems in and out of the classroom. They are open to discussion, and you should take advantage of their experience—especially if you have any problems with students in the classroom.

You were given two teaching booklets. *Teaching Strategies & Techniques* has useful hints about student classroom behaviors. *A Handbook for Adjunct Faculty* is a review of teaching, testing, and grading techniques. We have added to those suggestions in the appropriate sections of this guide. Read and study all of these materials, then ask the Department Chairman and other faculty members to clarify anything you don’t understand.

Adjunct faculty often wonder: “How can I get a different course assignment for more teaching experience?” We have four suggestions.

• Have you talked to the Dean and Department Chairman about your interest in teaching other courses?

• Have you offered to substitute teach in this course area?

• If you haven’t taught this course before, have you sat in on the class?

• Have you talked to the full-time faculty members who are currently teaching in this course area?

Meeting Everyone Else

Make it a point to meet the following people in this order of importance:

**1.** Meet your lab technicians and Division secretaries. They manage just about everything related to lab setups and classroom support. Successful employment depends on your professional interactions with these essential people. They are your keys to success here, and if you work with them, they will be happy to work with you.

**2.** Visit the faculty members in your course assignment area. Make sure that your approach to the course corresponds with the department’s design for the program. Ask about any specific problems they might have encountered in teaching this course. Use them as advisors for the first semester or two.

**3.** Visit with all of the other faculty members in your department. These people are invaluable sources of teaching information, and are excellent professional connections you can use for future job references.

Syllabus

You are required to prepare a syllabus for your class. Check the *Policies and Procedures* guide that the Dean gave you, and talk with the Department Chairman to make sure that your syllabus covers the minimum requirements.

New teachers often underestimate the value of a syllabus. It is the most important handout that your students receive on the first day of class. It sets the tone for your class, describes the responsibilities of the student, and minimizes student complaints later in the semester. The golden rule of a syllabus is: “be complete and be organized.” There are all kinds of helpful additions to a standard syllabus. For example, you could include description of Biology Majors courses, Disabled Student Services, pagers/cell phone policy, add/drop dates, attendance, etc.

A couple of example syllabi are included at the end of this guide. If you are new at this task, have someone read your syllabus to see if it conveys your intentions.

Section II: The Student

First Day Introduction

“Crashers” are the biggest disruption you will experience during your first class meeting. You must decide exactly how you will handle this problem *before* day one. Don’t add beyond 5% of the class maximum. Wait thirty minutes after class begins before taking roll. Plan on some first-day no-shows arriving at your class on the second day. (A rule of thumb is that 75% of the first day no-shows have dropped the class.) Don’t string your students along unless you actually plan to add them. Suggest other sections of the class that still have open slots.

Describe your class, paying particular attention to which students should or should not be taking your class (majors, G.E., prerequisites, etc.). Talk about the class workload versus personal workload. Anyone working 30 hours per week should be taking 8 units or less. Overloading units is the number one predictor of student failure at SWC.

Discuss the textbooks and other course materials. Give assignments the first day. This sets the pace and encourages any “non-participators” to drop early in the semester. You must never structure the first half of the semester with easy assignments and easy tests and then get much harder later on in the semester—this is the wrong psychology. Push students early and ease up later. Students build skills during the semester, so your assignments will naturally get more difficult to match their increasing abilities.

If you need to talk with various subgroups of students (adds, hard of hearing, sight impaired, EOPS, etc.), ask these students to stay after class. End the first day of class a few minutes early. This will allow you time to handle specific problems without talking to the entire class.

Lesson Plans

There is much more information available on this topic than can be covered here. Refer to professional teaching guides, talk with other teachers, and visit other classes for inspiration. A few rules for a good lesson plan are:

**1.** Write a clear description of what the students are responsible for learning. At the beginning of the class, present your students with a detailed outline or a written study guide.

**2.** Be absolutely organized. Write it down! Don’t fly by the seat of your pants, or you will fall victim to a strange burning sensation.

**3.** Use lots of transparencies along with the chalkboard. Making transparencies forces you to be very careful with your wording of concepts. It is much better to have several simple transparencies rather than a very complex one.

Study Guides

Study guides are a very important part of your course. These guides keep you and your students on target with the course content. The basic principle behind a good study guide is: “Know this and you’ll be prepared for the test.”

There are many successful approaches to writing a good study guide. Some teachers use lists of terms and concepts. Others use detailed and specific questions. Whatever form you develop, make sure that you refer to your study guide when you write your exams!

We’ve included a couple of example study guides at the end of this booklet to give you some ideas if you haven’t done one before.

Testing

Focus on testing as if nothing else matters. Teachers who quickly prepare exams usually assume that they can solve any problems by adjusting the grading curve. Wrong! This is a common and destructive teaching mistake. A poor exam undermines your credibility and discourages your students.

The design of your exams “drives” your class. It determines how students will listen and how much time they will spend studying. Furthermore, your tests direct the way your students relate to the subject area.

Remember to have your study guide at hand when writing the exam. Divide the test questions into topics. Do not randomly mix questions. Start with the easier questions, leading to the more difficult ones. It is best to have part of the exam cover terminology and another part cover application of concepts . If a student does poorly on the terminology section of the test, then you should suspect that there is a very basic problem in study habits. If a student misses many questions on the application of concepts section, then there is a problem in understanding the subject. Be clear and precise. No one appreciates trick questions or poorly worded questions.

Try to include a few critical thinking questions. Test questions involving critical thinking require a higher level of reasoning than those that require students to simply give back what was presented in class. It is probably best to give students some hint on your study guide about possible critical thinking questions. They are beginners at critical thinking in science.

We have included a couple of example tests to give you a range of what is being done by other teachers in Bio. 100.

*Special Note*: All classes must schedule a final exam activity. Don’t cancel this exam. Talk to the Department Chairman if you have any questions.

Grading

Grade and return your exams as soon as possible, preferably for the next class period. Tell your students how their exam scores correlate with the letter grades. Give them encouragement and suggestions for improvement on the next exam. This is especially important after the first test. Explain how much better they will have to do to raise their grades.

Keep students informed of their grades. This is important! A thorough explanation of your grading policies in the syllabus is not enough. After the second exam, show students how much better they must do to increase their average grade. (For example, many students mistakenly think that one “B” grade can raise two “D” grades to a “C” average.) Shortly before the last day for a “W” grade, give your students a summary of their standing in the class and the realistic chances they have of improving their grade.

In general, exams can get a bit easier in the last third of the semester. This is because students start “running out of gas” as the semester ends. Do your best to match the difficulty of your exams with a reasonable expectation of what your students can achieve. Remember: Don’t start easy and then get hard during the semester—this is the wrong psychology!

Cheating

If you intend to give a zero on a test or to drop a student from your class for cheating on an exam, then be sure to state your policy in the syllabus. Talk with the Dean or Department Chairman to make sure that your policy on cheating is consistent with college policy. Talk to other teachers about their experiences and solutions.

*The secret to handling cheating is to prevent it from ever happening in the first place*. Space out the students (every other seat) and never leave the room during the exam. If you have a large class, then use two forms of the test, or trade favors with a colleague to help proctor the exam.

If students look around during the test, then say something like: “Please don’t look around during the test because I will suspect that you’re copying answers.” Make eye contact with a suspected student while you make the comment to the class. If the wandering eyes continue, walk over to the student’s desk, put your hand on the desk, and whisper, “Don’t look around.”

Most importantly, do not confront a student publicly if at all possible. Talk to the student after the exam. Explain your concern that he or she seemed very uncomfortable during the test, and that you know this is a sign that students are having trouble with the subject matter. Be firm but be supportive. Ask about class load, workload, study time, and prior background in the subject. At some point in your conversation, you must decide on the most appropriate solution. Do you want to warn them? Do you want this student to show you their lecture notes? Do you want to counsel this student to drop your class and try fewer units? The judgment call is yours. Obviously, you can avoid all of these complexities if you can prevent cheating in the first place!

The Disruptive Student

The disruptive student can be the most unpleasant and difficult challenge to teachers. We offer these general guidelines:

**1.** Make a seating chart and separate friends.

**2.** Talk to the student after class. Say something like, “You don’t seem to be enjoying this class. Are you having problems with the course?” The key is to get information from the student so that you know the nature of the problem. Be supportive, but do not let yourself be vulnerable! One of three things will become apparent to you:

**a)** the student explains his or her frustrations, and never is a problem again,

**b)** the student needs to drop your class,

1. you have a serious problem and need outside help.

**3.** The day the disruption happens, tell a colleague. You must protect yourself against later false accusations. Sometimes a colleague can talk to the student for you, which can be very effective.

**4.** Inform the Dean or Department Chairman if the disruption repeats. Some disruptive students respond only to a higher outside authority. Problem students are masters at “setting you up” for their personal psychodramas. Don’t play. Absolutely never lose your cool!

Boredom

You will repeat the same lectures and labs semester after semester. It is easy for you to assume that students are getting bored with the same old approach. This is the most common boredom mistake that teachers make. Students are always a little bored. But, keep in mind that your lab or lecture is a first-time experience for them. If your program worked well a few years ago, then the problem is more likely *your* boredom—not the students’. Many good instructional programs are changed because of teacher boredom rather than for instructional improvement.

**Rule #1** Everybody gets bored sometimes. Don’t exaggerate the problem.

**Rule #2** Don’t project *your* boredom onto your students.

**Rule #3** Keep your students busy.

The best defense against boredom is enthusiasm—if you lose some of yours, just pretend that you haven’t. If you “act” as though finding an amoeba is still the most exciting event of your week, your enthusiasm will excite the students. “Acting” is a powerful way to influence student emotions as well as your own. Be on stage!

Keep your students busy. Use a quick-paced lecture style. Switch activities (film, problems to solve, lecture, slides, discussion groups, etc.). Break down the concepts—step by step. Make it simple, then add the complexities, or use several simple overhead transparencies rather than one complex transparency projected for many minutes.

student tutoring

You are the best tutor for your own classes, so schedule some time before exams for students to review problems (do this during normal class time). If you are teaching Biology 100, tell your students that their lab instructor in Biology 101 Lab can often help them to understand difficult lecture concepts. Otherwise, there are tutors available in the MESA/Bridges Room 323A, and the Math Science Center Room 393. Finally, there is the Campus Tutorial Center in Room 428K.

computers

There are computers available for student use in the MESA/Bridges Room 323A (see Barbara Hampson @ x5286 for sign up). In addition, you can arrange to have your students use computers in the Math Science Center Room 393, and the LRC has both IBM and MAC computers available for student use. You can get Internet access for yourself at the Math/Science office Room 345. There also is Internet access available in several of the Biology Department classrooms (talk with Barbara Hampson or the Department Chairman).

Miscellaneous Helpful Services

Parking Permit Math/Science Division Office

Keys (same)

Code for Xerox Machine (same)

Classroom Materials (same)

(pens, paper, markers, etc.) (same)

Voice-mail (same)

e-mail (same)

Schedule of Classes Department Chairman

Catalog (same)

Campus Phone #’s (same)

What classes are still open (same)

Desk-copies of Textbooks Department Chairman or Bookstore

Slide Projector, Overhead Projector Biology Department (Barbara Hampson)

or other classroom equipment The LRC also has A-V equipment.

Finally

We want this guide to provide you with some basic suggestions for teaching at SWC. We know that you have many successful techniques of your own, and ask that you share them with us. Best of luck to you this semester. Welcome aboard.