INTRODUCTION
This booklet is based on the premise that writing is more than just an important asset in all academic disciplines; rather it is, to borrow from linguist Robin Lakoff, the currency of the university. It is through language and writing that we communicate the knowledge that we accumulate. Writing includes far more than mechanical skills such as punctuation, grammar, and capitalization. Writing is an intellectual process that involves all the major forms of critical thinking (analysis, synthesis, comparison, inference, deduction, conclusion) and the ability to organize information, evidence, arguments, and counter-arguments in a logical and compelling form.

To encourage all instructors—whatever subject they teach—to incorporate writing assignments into their classes, we present some facts, some opinions, and some suggestions about the place of writing in the general university curriculum. We hope these ideas will be convincing to instructors who question the value of assigning writing in their classes, and our advice should prove helpful to instructors who want to assign more writing but are unsure how to proceed. The last section of this booklet—“Tip Sheets for Writers”—contains a set of one-page handouts that you can photocopy and distribute to your students.

Although everyone is concerned about the written “product” that students turn in, our focus is on writing as a process, a set of cognitive experiences that includes note taking, brainstorming, scribbling, talking with other students, drafting, and revising. That is, it focuses on the very processes that experienced writers go through, either consciously or unconsciously. This approach to writing has significant implications for instruction. Instructors who view writing as a process can provide effective guidance throughout an assignment, especially at the early stages, by discussing the value of outlines and notes, by explaining how to select and narrow down a topic, and by critiquing drafts. With this kind of groundwork, students are more likely to turn in better papers—and better papers are both more rewarding to read and less time-consuming to grade.

This booklet was produced by the Office of Educational Development (http://teaching.berkeley.edu), which provides consultation and support for faculty on all aspects of effective teaching practices. Contact the office for information about workshops and other publications on writing.

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ENCOURAGING STUDENT WRITING

Correcting papers can be a lot of work if you assume that on each and every piece of writing you must explain each grammatical error, respond to every sentence, or propose alternate analyses for each paragraph.

Overmarking, however, like over-watering plants, can do more harm than good. Students are likely to be confused or frustrated by a sea of red ink. So instead of correcting or marking papers as a copyeditor would, instructors can respond to papers as a reader, reviewer, or colleague would: query or note all egregious mistakes, comment on the strengths of the piece, and make two or three suggestions for improvement.

For specific suggestions on responding to papers, see the section “Evaluating Written Work.”

It’s true that students often do not have firm control over their writing when they enter your classroom. That’s just an incontrovertible fact, and to say that they should already know how to write does little to help them.

Students also resent writing assignments when the instructor conveys the feeling that writing is a burden to all concerned. And students resent assignments that are announced without any preparation. Instructors need to make it clear on the first day of class that writing is an integral part of the discipline they are teaching, and that writing is a way of learning more about the discipline.

A related worry is that students will resent having anyone other than a writing teacher evaluate their writing skills. But if students are apprised from the first day of the semester that all aspects of writing are intertwined—that what one says and how one says it are interdependent—they will appreciate what you are trying to help them accomplish when you comment on their communications skills.

The notion of placing responsibility for teaching writing on English departments probably comes from the misguided notion that writing is a set of mechanical skills to be mastered before the content is poured in. In addition, one must remember that the job of English departments is to teach English literature. Writing is just one of the ways to master literature.

But if one grants that writing, like reasoning, is an integral part of mastering a discipline, then teaching writing is the responsibility of each discipline.

At UC Berkeley, a wide range of departments offer courses that satisfy the Reading and Composition requirement. The focus of those courses is improvement in students’ writing abilities.
The connections between writing and thinking are fairly well established: the act of putting words down on paper compels the writer to clarify his or her thoughts. No matter what material or skills your students are expected to master during the semester, writing can help them reinforce, refine, and apply their newly acquired knowledge and understanding.

As a faculty member or Graduate Student Instructor, you have all the skills and knowledge you need to evaluate your students’ written work. You may find it helpful to pick up a little additional terminology (see the section “Common Problems: Grammar and Sentence Structure/Syntax”), but you need not be an expert in grammar to point out mechanical infelicities or logical flaws.

Many second-language errors seem daunting at first. But many of these mistakes fall into three categories that instructors can easily point out to their students:

- dropped verb endings and tense problems
- subject-verb agreement
- prepositions

Errors in these categories are often simply the result of lack of practice.

If your students have more troublesome language problems, you can contact one of the faculty in the College Writing Programs (642-5570) who specialize in teaching non-native speakers, or the specialists in Academic Literacy for Non-native Speakers at the Student Learning Center (642-3075).

Although every field has its special conventions for format and organization, the cornerstone of even the most specialized or technical texts is based on three principles—clarity, concreteness, and attention to audience.

Furthermore, whether or not your students learn the stylistic and formatting conventions of any particular field, by at least sampling various specialized forms of written discourse, they can better appreciate the structural and intellectual differences among various disciplines.

Finally, most Berkeley students, regardless of major, will be expected to write memos, reports, and proposals throughout their careers.

“I don’t know enough grammar to correct the students’ papers.”

“Many of my students are non-native speakers of English, and I’m not qualified to help them.”

“The kind of writing expected in my field is very specialized, and we don’t write very much.”

“Writing is irrelevant to the goals of this course.”
Incorporating Writing Activities into Courses

The following activities allow students to practice important learning skills, such as integrating new information, and also enable instructors to identify points in the subject matter that are causing students difficulty. Some of these activities have the added benefit of getting students to think before they are asked to speak in class. Often students respond better orally, that is, are more willing to participate in class discussion, if they have had a chance to put their thoughts down on paper first. Writing that facilitates learning does not have to be in big pieces, such as term papers, but can be found in a variety of shorter assignments.

Short Answer
At the beginning of class, as a quick review of the material covered previously or to refresh students’ memories of recently assigned reading, ask the class to respond in writing to several short factual questions. The responses can be just one or two sentences.

Short Essay
Before discussing a topic, ask students to write brief accounts of what they already know about the subject or what opinions they hold. This kind of previewing exercise is useful for focusing subsequent discussion and helping students formulate their questions. Some instructors have students write their answers on a 5 x 8 note card, so that they are forced to keep their answers short.

Writing about Problem Sets
Rather than asking students to provide the formulas or answers, ask them to describe how they might go about solving a problem. This can demonstrate their true understanding of the process.

Essay Questions
Add an open-ended essay question to multiple-choice, true-false, or short-answer exams. The essay form allows students to demonstrate their ability to organize information and to interpret the principles they have learned.

Term Paper
Present a term-paper assignment as a series of steps and give deadlines for turning in thesis statements, outlines, and rough drafts. Schedule time to discuss topics with students so you can troubleshoot problems before they develop.

Memo Recommending Action
Ask students to write a memo that convincingly summarizes their recommendations to colleagues concerning an upcoming policy decision. This exercise gives students practice in summarizing, providing evidence, and arguing persuasively.

Three-Minute Write/Quick Write
At regular intervals or whenever you introduce a new unit, begin the class by asking students to write for three minutes on a specific question.

At the beginning of class you might ask them to write down the one question they have as a result of the reading for the day. You can collect these immediately and skim them, looking for questions that you can answer as a way to begin the discussion.

At the end of class you might ask them to write down the major point (or points) you made, or to ask a question they have. Skim these before the next class period and use them as your opener for the day. Students don’t need to put their names on these short pieces of writing.

Note taking
By scanning students’ class notes, either regularly or occasionally, you can observe whether students are correctly taking down the material you present. If the same misunderstandings appear in several sets of notes, you can return to the topic in class to clarify the material.
use writing as a tool for learning

Notebook, Journal, Learning Log
Ask students to record interesting examples and puzzling ideas as they read, listen to lectures, or study. Journal entries might include passages copied from the readings and ideas that spin off from class discussions. These jottings can then serve as a rich resource for class discussions, papers and projects, and end-of-semester reviews. To motivate students to maintain a journal and to assess what students are learning, some instructors collect these journals once or twice a semester. Rather than assigning a grade, instructors will simply assign a pass or check mark for completed journals.

Double-Entry Journal
Ask students to draw a line down the middle of each journal page and record data (a line of text, a useful explanation) in the left-hand column and their response to the information in the right-hand column. This separation of data and responses requires students to assess, form opinions, and make judgments about information they read or hear about. Students should reread their journals from time to time, reanalyzing and refining their initial responses.

Summaries
Grasping the central points of an article or book and stating them succinctly are fundamental skills that all students need to practice. If you ask your students to write their summaries on 3 x 5 index cards, you can easily collect and review them, selecting the best to read aloud in class as models of different approaches to the task of summarizing. (Note: It is worthwhile to explain to your students that there is no one correct answer to this kind of exercise.) Plan to repeat this exercise three or four times during the semester.

Book Review for a Professional Journal
After perusing an appropriate journal to identify the format and approach of typical book reviews, students can practice their skills in summarizing and placing material in the context of related reading and research by writing a book review for a professional audience.

Letter to the Editor, Op-Ed Piece
Students can improve their understanding of technical or abstract issues by attempting to illustrate or explain the concepts to a general audience, such as the readers of a newspaper. This exercise can also be used to encourage students to draw connections between what they are discussing in class and contemporary events or public policy decisions.

Biographical Sketch, Historical Sketch
Researching and writing a brief account of a particular individual or event provides practice in selecting significant information and describing people, objects, and processes.

Company Report
Ask students to present their research in a paper intended for a professional audience that is not familiar with the field. For example, engineering students can write a report addressed to accountants, and vice versa. Emphasize the importance of learning how to present information in terms that can be understood by professionals from other fields.

Article for a Professional Journal
Make a conventional paper assignment more challenging and realistic by having students write as though they are going to submit their work to an appropriate professional journal. You might even have them follow the format requirements stipulated by the journal. Respond to these papers as a journal referee would.

Letter to a Public Official or Company Officer
Writing a persuasive letter, arguing for or against a particular policy, requires students to organize their case from the policymaker’s perspective, decide the best way to present supporting evidence, and anticipate and respond to counter arguments.

Make Papers the Beginning of a Conversation
This is a good way to make your comments on papers meaningful to students. Our own students tend to read our comments the way we read comments on our papers: perfunctorily. That means that often all the work we put into reading a paper is for naught, and any learning that we hope will take place as a result of the comments does not take place. In order to break students of this habit, try the following, if you have time. When you return a paper, ask them to 1) correct, right on the paper itself, any grammatical or syntactical problems you have pointed out, and 2) respond to any marginal comments you’ve made. They then should return the papers to you, and you can skim them to see if 1) they have been able to make mechanical corrections, and 2) they are understanding other marginal comments. You can either simply put a check mark on papers or comment on their comments.

Doing this has two great benefits. It forces students to actually read and consider your comments and it lets you know what students are and are not understanding. As a way to prepare students for this activity, give them a copy of Tip Sheet # 10, “What to Do When You Get a Paper Back.”
Designing Effective Writing Assignments

As the preceding section illustrates, the kind of writing activities you assign will depend on the intellectual skills (for example, critical thinking and analysis) you want your students to learn and practice. Whatever type of assignment you decide to make, spend some time in class preparing your students to do the work expected of them. For example, if you are assigning a book review, provide your class with several examples of good reviews to use as models. Discuss the particular features of these model reviews that make them effective pieces of writing. From this discussion students will better understand your expectations and grading criteria, and they will begin to learn how to critically evaluate a piece of writing—others’ or their own.

If you will be requiring a long term paper or research paper, plan to lay out the assignment as a series of steps and devise several warm-up exercises that students can complete well before the final paper is due. In this way students can practice (and learn from their early mistakes) basic paper-writing skills such as creating thesis statements, summarizing research, composing abstracts, and citing sources. Students also need writing activities that develop the cognitive skills necessary to produce a sustained piece of work (describing, analyzing, comparing, persuading, making recommendations, and drawing conclusions).

From the final section of this booklet, you may want to photocopy and distribute to your class Tip Sheet #1, which reminds students of the general principles of good writing; Tip Sheet #2, which focuses on writing research reports; and Tip Sheet #3, a checklist of criteria for evaluating written work.

**how to make essay topics more effective: some examples**

The following before-and-after examples apply the preceding points to paper topics from a variety of fields.

**From Political Science**

In his discussion of presidential campaigns, White presents an analysis of the three basic social issues we discussed earlier in the course—the cold war, the decline of European influence, and the rise of the third world.

Compare White’s analysis of each of these issues to those offered by other authors earlier in the course, identifying the basic points of agreement or disagreement in each case.

While it is clear what information this instructor expects the students to discuss, the question as posed might lead many students to produce a patchwork response (one paragraph on White and author A on the cold war; one paragraph on White and author B on the decline of European influence; etc.). By revising the second paragraph of the assignment, the instructor could point students toward a more cohesive thesis and a more integrated form of organization:

How do White’s analyses of these issues differ from the analyses offered by authors whose works you read earlier in the course?

**From English**

You are presented here with four different images of the hero: two mythical characters and two men. The first man is a generalized type, the other a specific hero. What idea of the hero is the author trying to portray in each case? How is this idea expressed? Consider how the characters relate to other characters and why, how they react to their fate, and the relationship of each to the action.

In this assignment, the main issue is lost in an array of questions. Help students focus attention by separating the central question out from the other information, and presenting the necessary background information either before or after the question.

You are presented here with four different images of the hero: two mythical characters and two men (one generalized, one a specific hero).

How is the author’s idea of the hero expressed here? Things to consider:

How do the characters relate to other characters? Why? How do they react to their fate? What is their relationship to the heroic action?
Try to ask only one question

Students are more likely to produce coherent, well-organized essays if you present them with only one question at a time. If you want to combine two or more questions in one assignment, explicitly remind students to answer all the questions.

Clarify your terminology

Be sure, for example, that students understand what you mean by “analyze” or “conclude.”

Specify any format requirements

Include instructions on length, reference form, presentation of charts and tables, and so on.

Phrase your question using “how?” or “why?”

Questions that ask how or why give students a head start in developing a clear thesis (see “Common Problems in Writing Papers”). In contrast, yes-no questions or who, what, where, and when questions tend to prompt list-like responses.

Use typography to distinguish subordinate points

Place the key question in a paragraph by itself. Place all points that students are to consider in answering the question in a separate paragraph.

Test out the question by pretending to be a student

By sketching out a response to the question you can double-check its clarity, focus, and completeness. Your students should have to work to interpret the material they are studying—not the paper topic or exam question itself.

Remember that your best students will do well no matter what

It’s the rest of your students who may sink or swim depending on how well the topic is written.

From Astronomy

Write a paper on one of the following phenomena. You should attempt to discuss something of the history of theories about this phenomenon, including latest studies and conflicting interpretations. Be sure to cite at least three different sources.

Tectonic features throughout the solar system

The rings of Jupiter

The moon Io

The “tenth planet”

Here, the phrases “attempt to discuss” and “something of the history” are confusingly tentative. The first paragraph of this assignment should be reworded.

Choose one of the following phenomena. Write a paper in which you discuss the history of theories about the phenomenon, including latest studies and conflicting interpretations.

In order to adequately cover the range of opinion and theory, you will need to work with a minimum of three sources. Be sure to cite them.

From History

Discuss the career of Franklin Roosevelt. What changes in American attitudes and policies toward other countries does his career reveal? What kind of reception did other countries give him, and how can one account for that reception?

The opening statement in this assignment is needlessly general, and the two what questions are likely to prompt students to simply enumerate the changes in attitudes and the kinds of receptions. A restatement of the topic will help students focus their responses.

This question has two parts. Be sure to answer them both.

How does Roosevelt’s career reveal changes in American attitudes and policies towards other countries?

How can one account for the reception other countries gave him?
Developing Ideas/Critical Thinking/Analysis
Perhaps the major problem for most students in any discipline is lack of experience in developing ideas and thinking critically about a subject. On the other hand, instructors often just assume that students possess these skills, which leads to frustration for both parties. Instructors should discuss with students what good analysis is in their particular field, and provide specific models of good analysis, critical thinking, and development of ideas.

Thesis Statements
Students often have ideas about a topic, and a lot to say, but they don't have an idea, a thesis. The result is a paper that rambles, that might include everything about the topic, but ends up having no real point.

Tip Sheet #4 shows students one way to develop a focused thesis statement. You may also want to review with your students the key elements of an effective thesis statement:

- A thesis should usually answer a how or why question. (Questions that ask who, what, where, or when most often lead to lists, not to theses.)
- A thesis should have an argumentative edge, an element of debate or contention.
- The verbs in the thesis should be in the active voice (not the passive), and the subjects should be concrete.

Introductions
Getting that first paragraph or first page just right often consumes far too much of students' time, to the detriment of the rest of the paper. And the introductory material may not be satisfactory anyway.

Tip Sheet #5 offers students general guidelines on writing introductory paragraphs. Students may at first need help in limiting the scope of their introductions. Remind them that they should not try to cover everything in their opening paragraphs and that they should not weigh down their introduction with too much detail.

Some instructors devote part of a class to critiquing and rewriting examples of poorly focused introductory paragraphs. (Tip Sheet #5 presents several such examples.)

Organization
Many students still come from high school with the notion that all organization is based on three points (“first I will discuss x, then y, then z”), but that the three points need not be in any particular order.

Some students will benefit from an in-class review of how to prepare an outline. You might also discuss the general forms of organization most prevalent in your field, for example:

- chronological—for discussing events and processes
- spatial—for describing concrete objects
- classificatory—for sorting objects into groups
- comparison and contrast—for analyzing the points of similarity and difference between two or more objects, events, or persons
- specialized formats—for technical, research, and field-work reports

A simple exercise that a student can perform to test the organization of a draft version of a paper is to read only the first and last sentence of each paragraph. The student should observe whether these sentences seem well sequenced and logical, whether the transitions from paragraph to paragraph are clear, and whether these sentences provide a faithful snapshot of the paper.

Grammar and Sentence Structure/Syntax
Although errors in grammar and sentence structure are usually not students' primary problems in papers, they are nonetheless the problems that many if not most instructors notice first. They are also the problems that tend to raise the hackles of readers. Students who truly have severe problems in grammar and sentence structure should be encouraged to buy and use a good grammar book and make use of tutoring services.

In addition, we suggest that instructors, as well as students, make use of Tip Sheet #8, “Marking Symbols.” By using some abbreviations on a paper, and referring the writer to the explanations on the tip sheet, an instructor can focus on concrete identification of the problem, instead of editing or writing “awkward,” which is rarely helpful.
Evaluating Written Work

There are many ways to respond to students’ written work, and no one method is appropriate for every assignment, every student, or every instructor.

The two extremes—completely covering an essay with comments or placing only a few scattered notations on a paper—are equally frustrating to most students, no matter what grade they receive. All students want to know what you thought about their main points or ideas. In addition, students receiving an A or a B know that their work is not perfect and will appreciate constructive criticism; students who receive a C- or below need to be told not just that their work is not satisfactory, but how to bring it up to par.

Limit Your Comments

Students benefit most from a mix of marginal notations and a longer comment at the end of the assignment. Resist the temptation to mark each instance of a repeated error. In general, overmarking frustrates students and hinders them from focusing on the two or three areas most in need of improvement.

Avoid Extensive Rewriting

You might be tempted to heavily mark, edit, or rewrite one troublesome paragraph as an example for a student. But rewriting has several drawbacks. First, the student is liable to say something like, “Of course your version’s better than mine—you’re the professor.” Second, the student may feel that you simply have not understood the paper. Third, the student may not be able to deduce from your revision the reasons that you made the particular changes you did. Fourth, the more you write, the less of it a student will read.

Marking Symbols vs. Editing

Some instructors mark grammar mistakes with symbols like those shown in Tip Sheet #8 (for example, FRAG for a sentence fragment). They feel that their students can then refer to a master list of symbols and learn to correct their mistakes. Other instructors believe that marking symbols intimidate or mystify precisely those students whose language skills are the weakest. These instructors prefer to write in a revision or a brief explanation of the error. Unless you have strong preferences, some combination of marking symbols and revisions is probably best. Use symbols for some errors (subject verb agreement, fragments) and show the student how to rewrite more troublesome mistakes (misplaced modifiers, faulty parallel structure). Comment on the quality of the writing.

In your final comments make some reference to grammar, usage, and style. To reinforce good habits and point out weak ones, you could write:

The variety in sentence length and structure makes for lively reading, but your overreliance on the passive voice produces some wordy and confusing patches. I’ve noted several of them.

Make the Marking a Learning Experience for Students

Point your comments towards future papers, e.g., “On your next paper, you might consider…” Encourage students to come to talk about papers after you’ve handed them back. The point should be to talk about strengths and ways to improve weaknesses, NOT to talk about the grade. That’s a different discussion.

Ask students questions in the margin, or at the end of the paper. Then make it a follow-up assignment for students to respond in writing to your questions. This reinforces the notion that the paper is part of a dialog.

Consider What’s Truly Important in Writing and What’s Just Grading

Instructors often find it easiest to mark grammar, spelling, and sentence structure errors because they are most comfortable with those. However, other aspects of writing (developing ideas, critical thinking, and analysis) are usually more important and harder to improve (and harder to teach!).

When reading papers, consider the following guidelines:

- Indicate problems in grammar, spelling, and sentence structure by underlining and circling.
- Ask brief questions or make brief comments in the margin about slightly more serious matters such as transitions, paragraphing, basic organization.
- Devote more time at the end of the paper or in office hours to the most serious issues: development of ideas; argument; use of sources; analysis.
ENCOURAGING STUDENT WRITING

A or B: A good to excellent piece of work. The interest of the reader is engaged by the ideas and presentation, and the reader is informed by the data. Style and organization seem natural and easy. Such a paper is technically correct—mostly free of both minor and major errors and typos. In addition, an A paper is marked by originality of ideas and/or excellence in presentation.

C: A competent piece of work, but not yet “good.” While C papers come in a wide variety of forms, it is clear that in one way or another, writing is still an effort for the author. In some C papers, excellent ideas are marred by poor presentation—either development, organization, or technical errors. In other C papers, the organization, structure, and grammar might be without flaw, but the ideas and development need work. In yet other C papers, there are only a few technical errors and the organization and ideas are adequate but not noteworthy. In college, a C paper is fine. Not a failure.

D: A piece of work that demonstrates some effort on the author’s part, but that is too marred by technical problems and/or flaws in thinking and development of ideas to be considered competent work.

F: This is a failing grade. Most instructors reserve the F for hasty, sloppy pieces of work that demonstrate no or minimal effort on the author’s part. Plagiarism also falls into this category. Most instructors consider it unproductive to give an F to a student who has made a sincere attempt; a D would be the more appropriate grade in such a case.

We do not recommend the following methods for grading:

Split grades (one for content, one for writing): Split grades only reinforce the false notion that content can be divorced from the activity of writing.

Paragraph-by-paragraph numerical scoring: To give a numerical subscore to each paragraph or page gives students the misimpression that a paper is a set of discrete units or short-answer responses rather than a coherent text.

Ignoring mechanics altogether in grading: To ignore the quality of a student’s writing skills in grading a paper sends another wrong message: that, finally, writing is only window dressing for the content. This will not be true later, and is not true for you, the grader. Your own work is constantly judged on both content and mechanics. It is fair, rather than unfair, to hold them responsible for the quality of the writing.

**guidelines for assigning grades**

**A**

Your comments at the end of the paper should include an explanation of why you gave the paper a particular grade. For example, a B paper:

While the sections in which you discuss X and Y are well reasoned, your discussion of Z is rather hasty. The sketchiness of that section, more than anything else, keeps this from being an A paper.

It is unwise, however, to mention that had Z been improved the paper certainly would have received an A, since a revised version of the paper might present other weaknesses.
Preventing Plagiarism

The best ways to prevent academic dishonesty are to inform students of standards for scholarship and conduct and minimize the opportunities for cheating or plagiarism. The following ideas, designed to encourage academic honesty, are excerpted from *Tools for Teaching* (Barbara Gross Davis, Jossey-Bass, Inc., 1993).

More information about academic dishonesty (including on-line pamphlets for both instructors and students) can be found on the UC Berkeley Student Judicial Affairs homepage: http://uga.berkeley.edu/sas/rights.shtml

General Strategies for Preventing Plagiarism

Spend 10–15 minutes discussing standards of academic scholarship and conduct. Describe acceptable and unacceptable behavior, giving examples of plagiarism, impermissible collaboration, and other practices relevant to your class. Explain that cheating will not be tolerated and discuss University policies, procedures, and penalties for academic violations. (These are available from Student Judicial Affairs, web address above.) Some departments hand out written materials that define cheating and plagiarism and require students to sign a statement that they have read and understood the material.

Make sure students know the criteria for evaluating their performance. Review their work throughout the term so that they know they know their abilities and achievement levels.

Learn to recognize signs of stress in students. Make students aware of campus resources that they can turn to for help if their grades are low or if they feel under pressure.

Familiarize yourself with the services of the Student Learning Center, Counseling and Psychological Services, and tutoring provided by student honor societies.

Ensure equal access to study materials. Establish a file in the library or departmental office of old homework assignments, exams, and papers.

Make students feel as though they can succeed in your class without having to resort to dishonesty. Encourage students to come talk with you if they are having difficulties.

If you suspect students of cheating or plagiarizing material, confront them directly. Talk with them about it. Do not conclude that cheating has taken place without hearing the student’s side. Consult Student Judicial Affairs for guidelines.

Using Paper Topics to Prevent Dishonesty

Assign specific topics. Design topics that are likely to require new research, that stress “thinking about it” more than “looking it up,” and that are challenging but not overwhelming. Topics that are too difficult invite cheating, as do boring, trivial, and uninteresting topics.

Limit students' choices of broad paper topics. If given complete freedom, students may founder and turn to commercially produced term papers, articles from the internet, or “file” papers as an easy out.

Change the topics or assignments as often as possible. This prevents students from simply appropriating an essay from someone who has already taken your course. And it keeps you interested when you read the papers.

Demystifying Writing Helps to Reduce Dishonesty

Give a short lecture on how to research and write a paper or essay. With this information, students will feel more confident that they know what is expected of them. The Teaching Library offers consultation services to students on developing research skills.

Discuss openly in class the difficulties of writing. Help students understand that the anxieties or blocks they face are a normal part of the writing process. "If, in the classroom, you emphasize the stages of the composing process and the normal tribulations of every writer, your students may be less likely to conclude that cheating is the only feasible way of getting from an assigned topic to a finished paper." (*Handbook for TA’s*, p.18)

During the term, schedule a variety of short in-class papers. In-class assignments help students develop their writing skills and help you determine their abilities. Instructors who assign only one paper a term have a hard time judging whether that assignment is the student's own work.

Early in the course require students to come in to discuss their research or essay topics.

Again, later in the course, ask them to share outlines and to discuss how they plan to organize and present their ideas and findings. This approach not only helps students write better papers, but also allows the instructor to see students' ideas develop.
**Explaining Plagiarism**

Clarify the distinctions between plagiarism, paraphrasing, and direct citation. Provide students with instances of correct and incorrect ways to use others' ideas and words. You might want to share the following example with your class (from *The Random House Handbook* by Frederick Crews, New York: Random House, 1984, pp.405–406):

Consider the following source and three ways that a student might be tempted to make use of it:

*Source:* The joker in the European pack was Italy. For a time hopes were entertained of her as a force against Germany, but these disappeared under Mussolini. In 1935 Italy made a belated attempt to participate in the scramble for Africa by invading Ethiopia. It was clearly a breach of the covenant of the League of Nations for one of its members to attack another. France and Great Britain, as great powers, Mediterranean powers, and African colonial powers, were bound to take the lead against Italy at the league. But they did so feebly and half-heartedly because they did not want to alienate a possible ally against Germany. The result was the worst possible: the league failed to check aggression, Ethiopia lost her independence, and Italy was alienated after all.¹


*Version A:* Italy, one might say, was the joker in the European deck. When she invaded Ethiopia, it was clearly a breach of the covenant of the League of Nations; yet the efforts of England and France to take the lead against her were feeble and half-hearted. It appears that those great powers had no wish to alienate a possible ally against Hitler's rearmed Germany.

Comment: Clearly plagiarism. Though the facts cited are public knowledge, the stolen phrases aren't. Note that the writer's interweaving of his own words with the source's do not render him innocent of plagiarism.

*Version B:* Italy was the joker in the European deck. Under Mussolini in 1935, she made a belated attempt to participate in the scramble for Africa by invading Ethiopia. As J. M. Roberts points out, this violated the covenant of the League of Nations.¹ But France and Britain, not wanting to alienate a possible ally against Germany, put up only feeble and half-hearted opposition to the Ethiopian adventure. The outcome, as Roberts observes, was “the worst possible: the league failed to check aggression, Ethiopia lost her independence, and Italy was alienated after all.”²

² Roberts, p. 845.

Comment: Still plagiarism. The two correct citations of Roberts serve as a kind of alibi for the appropriating of other, unacknowledged phrases. But the alibi has no force: some of Roberts' words are again being presented as the writer's.

*Version C:* Much has been written about German rearmament and militarism in the period 1933–1939. But Germany's dominance in Europe was by no means a foregone conclusion. The fact is that the balance of power might have been tipped against Hitler if one or two things had turned out differently. Take Italy's gravitation toward an alliance with Germany, for example. That alliance seemed so very far from inevitable that Britain and France actually muted their criticism of the Ethiopian invasion in the hope of remaining friends with Italy. They opposed the Italians in the League of Nations, as J. M. Roberts observes, "feebly and half-heartedly because they did not want to alienate a possible ally against Germany."¹ Suppose Italy, France, and Britain had retained a certain common interest. Would Hitler have been able to get away with his remarkable bluffing and bullying in the later thirties?


Comment: No plagiarism. The writer has been influenced by the public facts mentioned by Roberts, but he hasn't tried to pass off Roberts' conclusions as his own. The one clear borrowing is properly acknowledged.
SUBJECT A REQUIREMENT

Subject A is the one University-wide requirement that all undergraduates must satisfy by demonstrating proficiency in writing and critical thinking.

Some students satisfy the requirement by scoring at least 680 on the SAT–II: Writing Subject Test or by scoring a 3 or higher on the Advanced Placement Examination in English (Language or Literature). All other entering undergraduates are required to take the statewide Subject A exam, which asks for an essay response to a short passage typical of college-level texts. Students who do not pass this exam must satisfy this requirement by taking College Writing 1A at Berkeley, or taking an approved course at a community college (the latter only before enrolling at Berkeley).

READING AND COMPOSITION REQUIREMENT

All students must satisfy the Reading and Composition requirement, either through advanced placement scores, transferable courses, or through courses offered at UC Berkeley. This requirement is what might be called “Freshman English” at other institutions. The requirement is divided into two halves, usually labeled “A” and “B,” with “A” being a prerequisite for “B” and satisfaction of the Subject A requirement a prerequisite for both. A number of departments offer Reading and Composition courses; the content and methods of these courses vary from department to department:

- African American Studies (R1A and R1B)
- Art History (R1B)
- Asian American Studies (R2A and R2B)
- Celtic Studies (R1A and R1B)
- College Writing (R1A)
- Comparative Literature (R1A and R1B, H1A and H1B, R2A and R2B, R3A and R3B)
- English (R1A and R1B, R50, which satisfies R1B for English majors only)
- German (R5A and R5B)
- Linguistics (R5W—writing workshop in conjunction with Linguistics 5 that satisfies the second half of the Reading and Composition requirement)
- Native American Studies (R1B)
- Near Eastern Studies (R1A and R1B, R2A and R2B)
- Rhetoric (R1A and R1B)
- Scandinavian (R5A and R5B)
- Slavic (R5A and R5B)
- South and Southeast Asian Studies (R5A and R5B)
- Theater, Dance, and Performance Studies (R1B)
- Undergraduate and Interdisciplinary Studies (R55A and R55B)
- Women’s Studies (R1B)
Courses Emphasizing Writing

In addition to the hundreds of courses at Berkeley that require a substantial amount of writing (at least 20,000 words during the semester), and the senior thesis courses offered by many departments, a number of courses focus specifically on writing:

**African American Studies**
142C: Scenario and Film Criticism
158A: Poetry for the People: The Writing and Teaching of Poetry

**Business Administration**
100: Business Communication

**Chemical Engineering**
185: Technical Communication for Chemical Engineers

**Chicano Studies**
149: Creative Writing

**College Writing Programs**
108: Advanced Composition—Digital Storytelling
110: Advanced Composition—Challenging Writing
300: Introduction to Theories and Practices of Teaching College Composition

**Education**
C147: Writing from the Field: The Social Issues of Literacy

**Engineering—Interdisciplinary Studies**
140: Technical Communication for Non-Native Speakers of English

**English**
43A: Introduction to the Writing of Short Fiction
43B: Introduction to the Writing of Verse
141: Modes of Writing
142A: Advanced Composition for Potential English Teachers in Secondary Schools
143A: Short Fiction
143B: Verse
143D: Expository and Critical Writing
143N: Prose Nonfiction
143T: Poetry Translation Workshop

**Environmental Design**
101A-B: Writing about Environmental Design. An intensive workshop for students interested in writing about architecture, landscape, and the built environment. Open to students outside the Environmental Design major.

**History**
101: Seminar in Historical Research and Writing for History Majors

**Rhetoric**
110: Advanced Argumentative Writing
Directory of Programs and Services

Athletic Study Center
http://asc.berkeley.edu
(510) 642-8402
The center provides study groups, individual tutoring, and advising for student athletes. Certain classes (College Writing, composition classes, and foreign languages) have regular tutors assigned. Tutoring for other classes can be arranged by request. Each student athlete is assigned an individual adviser.

Berkeley Writers at Work
(510) 642-5570
http://www-writing.berkeley.edu/bwaw
Berkeley Writers at Work is a once-per-semester forum in which well-known Berkeley faculty are interviewed on stage about their writing process. The events are free and open to the campus community. Some instructors assign students readings from the guest authors and make Berkeley Writers at Work a part of their assignments for the semester. For more information, contact Steve Tollefson, (510) 642-6392; email: tollef@uclink.berkeley.edu.

College Writing Programs
http://www-writing.berkeley.edu
(510) 642-5570
The College Writing Programs offers a number of courses in writing, including College Writing 1A which satisfies the Subject A requirement and the first half of the Reading and Composition Requirement; CW 108: Advanced Composition—Digital Storytelling; CW 110: Advanced Composition—Challenging Writing; and CW 300: Introduction to Theories and Practices of Teaching College Composition (open to all graduate students interested in developing their skills in teaching writing). Faculty in the College Writing Programs are also available to direct faculty and students to appropriate resources on campus and to consult with faculty about writing issues.

Writing Across Berkeley
http://www-writing.berkeley.edu/wab
Writing Across Berkeley is a forum on the teaching of writing produced for and by Berkeley faculty. Articles provide guidance on how to incorporate writing in a wide range of disciplines. You can request copies from the College Writing Programs (642-5570) or you can read WAB online.

Disabled Students’ Program
http://dsp.berkeley.edu/dspServices.html
(510) 642-0518 (voice)
(510) 642-6376 (TDD)
DSP staff recommend academic accommodations—like large-print handouts or extended time for exams—so that students have a chance to learn and demonstrate what they have learned in classes. The program also provides many support services: Auxiliary Services (notetakers, sign language interpreters, etc.), disability-related advising, instruction in academic strategies and study skills, and technical support in selecting and adapting computers (assistive technology).

They also publish a helpful booklet for faculty, “Teaching Students with Disabilities.”

Office of Student Judicial Affairs
http://uga.berkeley.edu/sas/rights.shtml
(510) 643-9069
The office has valuable information for both faculty and students on issues of academic dishonesty. Academic dishonesty information is available online.

Student Learning Center
http://slc.berkeley.edu
(510) 642-7332
The Student Learning Center offers support, through individual tutoring or workshops, in economics, mathematics, science, social sciences, statistics, study strategies, and writing. Special services are also offered for non-native speakers of English. The SLC offers drop-in and by-appointment tutoring in writing for all undergraduate courses. There is also drop-in grammar and word choice help, and a variety of other resources. If you have a student who needs writing help that you cannot provide, this is the place to start.

Instructional Improvement Grants
http://teaching.berkeley.edu/grants.html
Faculty can obtain small amounts of money (up to $1,000) through the Minigrant Program or larger amounts (up to $3,500) through the Classroom Technology Grants Program for classroom innovations of all kinds, including those related to writing. For more information, contact Michael Hardie, (510) 643-9433; email: hardie@uclink.berkeley.edu.

Library Resources
Moffitt Library
(510) 642-5070
http://www.lib.berkeley.edu/MOFF
Moffitt Library has a large collection of resources.
books—grammar, rhetoric, style books—on writing in general and on writing in particular areas (humanities, sciences, social sciences). A listing of these books can be accessed on UCB's web-based catalog, Pathfinder: http://sunsite2.berkeley.edu:8000/

Teaching Library
(510) 643-9959
http://www.lib.berkeley.edu/TeachingLib
Teaching Library staff will arrange for group tours, drop-in classes, and course-integrated introductions to the library, covering conducting research and seeking information in the library and beyond, for individual classes and programs.

Research Advisory Service
http://www.lib.berkeley.edu/InfoCenter/ras.html
(Information Center, Doe Memorial Library, Floor 1)
Students can make half-hour appointments for assistance with library research projects in the humanities and social sciences.

Venues for Student Writing

The Berkeley Undergraduate Journal
http://www-learning.berkeley.edu/buj
(510) 642-3795
The Berkeley Undergraduate Journal welcomes papers in all academic fields from UC Berkeley undergraduates. Essays are selected on the basis of academic content, general interest, and clarity of writing. The journal is sponsored by Undergraduate and Interdisciplinary Studies in the Undergraduate Division of the College of Letters and Science.

Campus Prizes in Writing
http://uga.berkeley.edu/fao/prizes.htm
(510) 642-3498
The Academic Senate Committee on Prizes awards a number of prizes in short stories, poetry, essays in a variety of subject areas, and other kinds of writing.

Creative Writing
http://learning.berkeley.edu/creative
The campus offers a minor in creative writing, through the Division of Undergraduate and Interdisciplinary Studies.

Student-Run Publications

There are more than fifty student publications on the Berkeley campus—ranging from literary, humorous, and academic to ethnic, cultural, and political, and including a daily student newspaper and an award-winning yearbook. These publications seek submissions of all kinds—poetry, essays, articles, and stories—from Berkeley undergraduates. For a listing, go to the Office of Student Life in 102 Sproul Hall or check out the student publications website at http://uga.berkeley.edu/sas/pubs.shtml. For more information on student publications and how to get involved, visit the ASUC Student Publications Center in the Heller Lounge of the MLK Jr. Student Union, (510) 642-2892, check out the Office of Student Life student publications website, or contact the Chancellor's Committee on Student Publications, (510) 642-6772, hgr3@uclink4.berkeley.edu.

On-line Reference Materials

The Elements of Style: http://www.bartleby.com/141


The Online Writing Lab (OWL) of the College Writing Programs: http://www-writing.berkeley.edu/OWL
Student Writing
How to Write a Term Paper in Biology

Why do a term paper, anyway?

• It gives you a chance to get into a topic deeper than we can in class
• Most IB majors will work in fields that require research and writing reports
• The department and university encourage writing in upper-division courses
• Writing develops critical thinking
• Researching develops library skills
• It’s 25% of your grade
• Being able to do this improves your career potential

What this assignment is and isn’t

This is not a paper for a class in Conservation Biology, Evolution, Genetics, or Behavioral Ecology. We ask different kinds of questions. “Appropriateness of topic” is 30% of the grade.

Basic Theme: “What factors have contributed to and (or) maintain biological diversity?”

Basic Title: Should have a “HOW” at its beginning, and should focus on reasons.

Examples: Think of this title format. It doesn’t have to be exactly like this, but it’s a start.

How does/did “A” affect the “B” diversity of “C” in “D”?

Let “A” = competition, tectonic activity, genetic drift, Permian extinctions, land bridges, disruptive selection, allometry, climatic constraints...

Let “B” = species, morphological, ecological, adaptational, populational, sustainable, clade, biogeographical...

Let “C” = nearshore invertebrates, wetland communities, horses, browsers vs. grazers, arborescent land plants, behavioral responses, predators...

Let “D” = the Triassic, the South-North American interchange, Pleistocene Africa, the New World tropical forests, the tundra, Asian carnivorans, Australia, the California chaparral...

Some good and not-so-good topics

“Our friend, the beaver” is not so good, and “the diversity of beavers” sounds like a description of a group of rodents, but “how beavers promote community diversity in lowland waterways” is good.
“The evolution of horses” needs some fine-tuning, even though it could cover increasing horse diversity through time, because it is so open-ended and vague. The question “How was the diversity of horses affected by climatic change in the mid-Tertiary?” is more specific and promising. You might find that other factors were involved, too, and you'd want to specify what kind(s) of diversity.

“Low genetic diversity in tree frogs and the threat to biodiversity” sounds impressive, but it's faulty on several counts. First, diversity vs. variation: is genetic diversity really demonstrated? How would you establish this? Second, how does one species comprise biodiversity? Third, as you remember from class, low genetic variation isn't necessarily abnormal or dangerous to a species. What else might be going on? THAT could be a better topic, if it could be generalized beyond one species.

“Nest parasitism in cuckoos” is a neat topic, but what does it have to do with biodiversity as we define it? So the cuckoos shove the host parent's eggs out. What aspect of diversity has changed? A better question might be to investigate the diversity of brooding strategies of cuckoo relatives, to see how this syndrome may have evolved and what biological flexibility it might entail.

“Alteration of rivers and their effects on salmon” might be a good paper for a class in fisheries or conservation biology. But what is the relationship to biological diversity? One might argue that if a given population of salmon has historically spawned in a river now closed to them, diversity of the salmon species will decrease (but what kind of diversity?). But if the same lineages migrate to the same river to spawn each year, how much gene flow is normally going on? How would you know if this is important to maintaining populational or ecological diversity?

Remember: if you can't explain to us what your topic has to do with the evolution or maintenance of biological diversity as we define it, it probably won't be approved because we don't want you to get an automatic C-minus. We do, however, want to work with you to develop a topic that you'll enjoy researching and that will give you a well-crafted paper. So please keep in contact with us.

Moving from a subject to a topic to a thesis

- A subject is broad: how competition affects species diversity in African carnivores
- A topic is manageable: how felids and hyenids partition the prey species they hunt
- A thesis is the main idea: felids hunt large prey, hyenids hunt smaller prey

BUT WAIT! In your research you may find that the thesis is wrong. Perhaps “felids are hunters, hyenids are scavengers.” Or vice versa! Or maybe “Hyenids hunt in packs and kill prey of many sizes, whereas felids hunt singly and only kill prey about their size.” Or perhaps “No pattern emerges that suggests that competition among carnivores is important in structuring prey species diversity in Africa.” Be prepared to revise. Sometimes a “negative” result is important because it contradicts assumptions that have been held but not tested. And maybe, the more you look into your topic, the less it seems to have to do with diversity. If so, come talk to one or more of us.

Narrowing Down

Move progressively from a subject to a topic to a thesis.

Keep narrowing and focusing on a single question that can be answered reasonably.

You won't use all the material you research.

You don't have to include it all in your paper.

There will be dead ends.

Where to Look

The topics discussed in class are those most appropriate to the course.

The Reserve Reading List (Biosciences Library) for this course has some great places to start.

Use the resources explained in section at the library.

Great ideas are found in every issue of Trends in Ecology and Evolution.

Once You Have a Topic

Check out some good recent review articles. Be sure to use more than one.
Discuss your library research with an instructor or GSI. Make sure you're on the right track.
If using the web, apart from the library website, know what to use and what to avoid.

**As You Begin to Write**

- **Form an outline.** Each paragraph should begin with a topic sentence. A topic sentence explains what the rest of the paragraph will be about. The rest of the paragraph provides support for the topic sentence. If you string the paragraph sentences together, they should give you the basic summary of the paper. When that happens, you're getting it together well.

- **Cull all the sentences, paragraphs, and discussions of references that aren't essential to developing your main point.** An essay should not simply be a string of results of papers you've read.

- **Present a synthesis of the research you've done, not just a summary of other people's research.** Make sure you answer the question you've asked in your title. It need not be a definitive answer, because quite often there is no single answer. What's important is how you've thought about the question. Again, discuss this with us to bounce ideas and get suggestions for good references.

- **Use what you've learned in class.** This doesn't mean rehashing your class notes; it means remembering, for example, that phylogenetic analysis is useful in testing many different kinds of problems. Bring this in: you've learned it, and we think it's important, or we wouldn't have spent time on it. Just because the authors you've read haven't figured this out doesn't mean that it's not important. The same thing is true for definitions of diversity vs. variation, sustainability, and so on.

- **Your conclusion does not have to shake the world.** It should, however, summarize the state of affairs and suggest what needs to be done or known in order to advance the problem.

**Some Common Problems with Term Papers**

- **Inappropriate topic.** This is the most common problem. If your treatment of the topic is not appropriate to the assignment, you lose 30% of your grade off the top. The best way to avoid this is to listen carefully to the advice of your instructors. They often will not give you a flat “NO” but will say, “well, if you approached it this way....” Listen to this, because it means that your topic is still not appropriate. Until you hear “YES,” you're not there yet.

- **Inability to distinguish diversity from variation.** Look at your notes and talk to us about this.

- **Poor development of the topic.** Read the previous sections to see how to do this correctly.

- **Poor choice of resources.** Dwelling on textbooks, review articles, and magazine pieces shows that you don't understand how to read or research peer-reviewed literature. Don't simply include a couple of journal articles for window dressing; they must be important to the development of your paper.

- **Writing mechanics.** Choose the words you use; do not simply use the first words that occur to you. Do not imitate the scientific writing you read. It is written by people who usually have no idea how to write for normal people; otherwise normal people would read it.

- **Bad habits.** If you use the phrases "due to," “because of," “the nature of," and “in and of itself” (the list is not exhaustive), you immediately lose points. The first two phrases are simple copulatives that do not express the relationship between parts of a sentence. Use instead the word “because” and follow it with a clause that contains a subject and a predicate. The last two phrases pretend to mean something, but mean nothing. See previous point.

- **Failure to proofread.** Have your roommate or someone else proofread your paper before you hand it in. We expect that it will be free of typographical errors and grammatical errors. If you are not sure of some of these conventions, get someone to help you understand how to fix grammatical errors. In the outside world, you will be judged by how you speak and write. Why not here?

- **Citing sources in the text.** Don't use footnotes. The standard form is (Smith, 1982) or (Jones, 1983, p. 26). No other format is acceptable. Most websites are not acceptable. Think about peer review.

- **Plagiarism.** This is unacceptable under University policy and can lead to expulsion, yet few students pay much attention to it. (In the outside world, plagiarism can land you a lawsuit, so it is important to learn about this now.) Consult any edition of any writing handbook, for example The Random House Handbook, by Berkeley English Professor Frederick Crews.
Copying someone else’s work directly and passing it off as your own is the most egregious version of plagiarism, but you might not realize that there are other, equally severe ones, with equally severe penalties.

Consider this source text, from The Myth of Continents, by M.W. Lewis and K.E. Wigen (U.C. Press, 1997, p. 120):

“Race has always been an inescapably geographical concept. In earlier years, many scholars assumed a simple continental correspondence, associating each landmass with a discrete race readily identifiable by skin color. While this model was abandoned long ago as both geographically and biologically unsupportable, the general notion of correspondence persisted. In theory, different races have always been tied, at least in their origins, to distinct areas of the world.”

Let’s say you wanted to use this idea in your paper. How might it be incorporated?

Student Version 1: “One might say that race has always been a geographical concept. Scholars once assumed that race corresponded to continent, and even skin color. This is no longer held, but the notion persists that races are tied to distinct areas of the world.”

This is clearly plagiarism. The student has stolen the ideas and phrases without attribution.

Student Version 2: “Race has always been a geographical concept (Lewis and Wigen, 1997). Scholars used to assume that race corresponded to continent and skin color. But even in our more enlightened age, we still associate these things even though they have no biological basis.”

Still plagiarism. The student has given a nod to one part of Lewis and Wigen’s original formulation of the problem, but not to all parts, and hence has passed off their insight as his own.

Student Version 3: “Lewis and Wigen (1997) note that race has always been tied to geography, and even correlated to continent and skin color, even though such notions are not supported geographically or biologically. One question that emerges from this observation is what kinds of genetic information could establish whether race is a defensible biological concept? This could be crucial for understanding the interplay of geographical and morphological concepts of race with cultural and ethnographic ones.”

No longer plagiarism. The student has correctly cited the ideas of Lewis and Wigen and has gone on to use them to ask a new question, to which other data from other sources can be applied.

As noted in the reader, we expect students to understand and avoid plagiarism by citing sources that you consult. On the other hand, your paper should not just be a string of quotations from other people’s work! We’ll be glad to help you as you write your paper; please consult any of us.

MEET DEADLINES! Please refer to pp. 10–12 of your reader.

- **Term paper topic** is due this week before section (as it says in the schedule, not Friday as it says in the reader). Please email it to your GSI so that it can be returned to you easily and quickly with comments. It can also be forwarded to other instructors who can help you further. See p. 10. In this phase, we want to start working with you on shaping an appropriate topic for the course.

- **Extended term paper topic** is due two weeks after this before section (as it says in the schedule, not Friday as it says in the reader). Please email it to your GSI so that it can be returned to you easily and quickly with comments. It can also be forwarded to other instructors who can help you further. See p. 10–11. This is where we expect you to have firmed up your idea, with some references.

- **Rough drafts** are not mandatory but are strongly encouraged, especially if you have never before written an upper division term paper in biology, or if you have trouble with writing. This is due during the week of April 3. See p. 12–13.

- **Final versions** are due Friday, April 21, in class. Anytime after that, 10% off your grade, and 10% for each additional day. This is in fairness to students who work hard to make deadlines. Please allow time for broken printers and crashed hard drives. And if you have an emergency, please let us know right away so we can help you, rather than after the fact. Thanks.
How to Use the Following Tip Sheets

The following ten tip sheets are designed to be photocopied and distributed to students. Please note that not every tip sheet is appropriate for every class and, as indicated below, certain tip sheets work best when handed out at specific times during a term.

#1 General Considerations for Writing
Hand this out on the day you make your first paper assignment. Most of the suggestions are actually reminders, but should serve to reinforce the fact that you take writing seriously.

#2 Hints for Writing Research Reports
Hand this out when you first assign a research paper. While many of the suggestions have to do with format and therefore won’t be used until later stages of writing, the tip sheet contains a number of suggestions that relate to research.

#3 Reviewer’s Appraisal Form
Students can use this to evaluate published articles, papers exchanged with classmates, or drafts of their own papers. Ask students to use NA (Not Applicable) for items that don’t relate to the article or essay under review.

#4 From Subject to Thesis
This tip sheet shows students one way to think about topics assigned to them and how to turn general topics into specific ones. Not all papers need to contain an explicit thesis statement such as those in the tip sheet, but if students work with one while drafting, their papers will be better organized and developed.

#5 Guidelines for Introductions
This sheet covers suggestions for general essays and articles. Some disciplines and journals will have specific formats that may contradict some of the suggestions here.

#6 Active and Passive Voice
Tip sheets #6 and #7 are short, painless lessons in style. While some disciplines rely more on passive voice than others, people in all disciplines agree that students overuse this form.

#7 Predication
In essence, this tip sheet tells students to get their sentences off to a fast, concrete start. If you ask for drafts of a paper, you might hand out tips #6 and #7 when you return the drafts, and ask students to read through their papers looking specifically for passives and predication problems.

#8 Marking Symbols
Some instructors hand out this tip sheet at the beginning of a term to 1) apprise students of the kinds of grammatical and structural problems the instructors are concerned about and 2) allow students to refer to the sheet while working on their papers. Other instructors hand the sheet out when they return papers as a sort of key to the marks they have made on papers.

#9 How to Develop an Idea
This tip sheet provides students with at least some methods they can begin to use to develop the critical thinking and writing skills instructors try to instill in them.

#10 What to Do When You Get a Paper Back
The purpose of this tip sheet is to help students break the cycle we all are involved in. They write, we comment, and they ignore everything but the grade.
General Considerations for Writing

1. Don't feel that every word you write must be graded. Writing can be a way of learning things, not merely a road to being evaluated. We (all of us) often don't know what we know or what we want to say until we begin to write.

Therefore, when working on a paper, write for yourself from time to time. Try out a new idea and see how it looks on paper. Evaluate some of the sources you are looking at; you may not know exactly what you think of them until you have written down your thoughts.

2. Consider the idea that your paper is not an end in itself, but the high point in a process, a dialog between you and your instructor. This means that you must pay attention to the marginal and end comments your instructor makes; don't read them quickly and dismiss them. Study them; where suggestions or criticisms appear, turn the paper over and correct mistakes, try out suggestions, heed criticisms, or counter the criticisms in writing. Only by actively grappling with your instructor's comments will you learn from your mistakes.

3. Revise, revise, revise. Don't confuse revision with the simpler process of correcting spelling and punctuation. After composing a draft, look at the paper again. Learn to see where new material is needed, where material should be deleted and where reorganization is required.

4. Always assume that whoever reads your paper will be evaluating your grammar, sentence structure, and style, as well as the content. Don't fall back on the myth that only English teachers should be judges of writing. Every teacher who assigns you writing will be a judge of your writing. Content—what you say—cannot really be divorced from form—how you say it.

5. Adjust your writing style to your audience, your topic, and the demands of the field.

6. Writing is by nature argumentative. In every piece of writing you are trying to convince a reader of something, even if it is to convince the reader that the writer's description of a rock is exactly the way that rock appears.

7. A term paper is more than a compilation of research. From your reading and research you need to distill a central argument—a thesis statement. Then you can organize and synthesize your materials into units of evidence for your argument.

8. A cardinal rule of writing: the more abstract and intellectual your topic, the more concrete your language should be.

9. Good writing in any field can rely on metaphors, similes, analogies, implications, and connotations—these are not for so-called "creative writing" alone. Use them to clarify a point, not to impress your audience.

10. When in doubt, consult your teaching assistant or professor in office hours. They want to help.
Hints for Writing Research Reports

(adapted from Geology 107; this material is used by permission of Professor Walter Alvarez)

The signs of a professional manuscript are strong organization, clarity, good grammar and perfect spelling, neatness, and adherence to the format of the particular journal. Well-written manuscripts get reviewed faster, are more likely to be accepted for publication, and require less rewriting later. Finally, your own pride and self-esteem should motivate you to produce the best work you can.

Evaluating the Material You Cite

- Re-evaluate other people's data wherever possible—do you agree with their interpretation?

- Each time you cite someone's work, think about what evidence the author used, and whether you accept the conclusions reached.

- Just because a statement is in the literature, it is not necessarily correct. If you uncritically repeat an incorrect conclusion, you help to embed an untruth deeper in the literature, making it harder for someone else to correct later.

Organizing the Manuscript

Use headings as signposts to clarify the structure of the paper. A long paper without headings drags and is difficult to follow.

Good Scholarship

- When you copy or modify a figure from another paper, cite the original source in your figure caption. (Make your figure captions as clear and informative as you can.)

- Make it quite clear which data, ideas, and conclusions are your own, and which ones you got from the literature. If the reader cannot easily tell the difference, your scholarship is deficient.

Use the format of the journal to which the manuscript will be sent.

- Examine back issues of the journal. Write your headings, figure captions, and references in exactly the same way.

- Especially check the reference format; almost every journal has a slightly different style. Be sure you understand where to put commas and colons, what titles are underlined, where to put the date, etc.

- There are two kinds of references:
  1) You can use the authors' names in the sentence proper: "Jones and Smith (1981) state that..."
  2) You can place the authors' names in parentheses: "The discovery of trilobites in this formation (Jones and Smith, 1981) showed that..."

Grammar

- Bad grammar distracts the reader from what you are trying to say. (Would you dribble a basketball while you were trying to explain a difficult concept to someone?)

- Good technical writing avoids possessives ("the sandstone's matrix") and contractions ("olivine isn't present").

- Good technical writing does not overuse the passive construction ("fossils were collected").

Proofreading

- Once you have spent enormous effort on the research and writing, proofread your manuscript two or three times—typing errors can escape a casual proofreading. Seriously hunt them down.

- Keep looking for unclear passages, format errors, poor reasoning, etc., right down to the moment you submit the paper.

- Check that all references cited are in the bibliography and vice versa.

- A good trick for checking that quotations are exactly accurate is to read word by word backward.

A final word: This probably seems like a lot of rules. But after you have systematically applied them to two or three manuscripts, they become second nature. Turning out a first-class manuscript is extremely satisfying!
### Reviewer’s Appraisal Form

**Title of Paper:**

**Author(s):**

**Reviewed By:**

<table>
<thead>
<tr>
<th>Checkpoints</th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
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<tr>
<td>1. Is the subject or problem clearly stated?</td>
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<td>2. Are opposing viewpoints, if any, given proper consideration?</td>
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<td>3. Are the conclusions based on sound evidence?</td>
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<td>4. Are the style and tone appropriate for the topic?</td>
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<td>5. Are the grammar and sentence structure correct?</td>
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<td>6. Are the sources properly cited?</td>
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<td>7. Is the organization clear and helpful?</td>
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**Commentary:**

8. What did you learn from this paper?

9. What questions do you have for the author?

10. What, if anything, has the author overlooked?

11. What is the greatest weakness of this paper?
From Subject to Thesis

Usually your instructor will assign a broad subject for a term paper or essay. For example:

The role of mitochondria in obesity

Discrimination against Japanese Americans during World War II

The uses of horror in the short stories of Nathaniel Hawthorne and Edgar Allen Poe

Within this broad subject, you need to define a specific topic. Obviously, the narrowness or breadth of this topic will depend on the length of the essay or paper you are expected to write. As Professor Frederick Crews points out in *The Random House Handbook*, one way to define a topic is to pose a question about the general subject. But not any question will do. For this purpose, questions headed by How or Why are preferable to yes-no questions or questions headed by Who, What, Where, or When. The logic here is that How and Why questions are more likely to lead you to an integrated and coherent answer; the other questions are more likely to prompt you to merely recite a list of discrete items.

Your answer to your topic question will provide the thesis statement for your essay. For example:

**Subject**
The role of mitochondria in obesity

**Topic question**
How do mitochondria control weight?

**Thesis**
By regulating the rate at which cells metabolize fats, mitochondria play an important role in controlling body weight.

**Subject**
Discrimination against Japanese Americans during World War II

**Topic question**
Why did government officials allow discrimination against Japanese Americans?

**Thesis**
Government officials allowed discrimination against Japanese Americans not because it was in the nation’s interest but because it provided a concrete enemy for people to focus on.

**Subject**
The uses of horror in the short stories of Nathaniel Hawthorne and Edgar Allen Poe

**Topic question**
How do Hawthorne and Poe achieve similar Gothic effects in spite of using radically different subjects?

**Thesis**
Although their subjects are different, Hawthorne and Poe achieve similar Gothic effects by delving into the psyches of the characters rather than relying on cheap horror tricks.

In general, a thesis should be written in the active voice (not the passive) and should contain concrete nouns (rather than abstract concepts). In drafting your thesis, you may find it helpful to construct a phrase that includes the word because. Whether or not this because phrase appears in your final thesis, writing such a phrase will encourage you to summarize your reasoning while you are working on your essay.
Guidelines for Introductions

1. Use the introduction to set the tone for your essay or paper. Appear to be interested in the topic; make it seem to be of vital concern to you, at least for the time you are writing the paper. Develop an assured tone. Phrases such as “I hope to prove” or “I would like to show” only make you appear insecure, which then casts doubt on what you say.

2. Catch the reader’s attention. You want the reader to want to read your paper. Start with an example, a quotation, a statistic, a question, or a complaint and use it as a theme that you refer to throughout the paper.

3. State your thesis and provide a subtle blueprint for the paper. Without giving away all your wonderful points, let the reader know where your paper is headed. But don’t say, “First I will talk about X, then I will talk about Y.” Be careful, too, of confusing your method of organization with your thesis. To say, “I will compare Huckleberry Finn and Moby Dick” only tells us what you will do—but why are you comparing them? What is the purpose? What is your thesis statement?

4. Don’t be afraid to break up your introduction into several paragraphs. One huge paragraph at the outset of a paper most likely will put readers off.

5. Unless they are specifically called for by your instructor or your discipline, avoid such phrases as “I will discuss” or “This paper will examine.” Better to just dive right in.

Here are some introductions and suggestions on how to improve them:

**From History**

The McCarthy Hearings of the 1950s were made a black comedy by the circumstances surrounding the hearings. Behind this façade lay issues that were deeply disturbing to the Americans of the fifties. By an examination of the McCarthy Hearings, some of the issues can begin to be perceived and analyzed and perhaps they can reveal a better understanding of the decade.

The major problem here is that there is no thesis. The last sentence, “By an examination...,” seems like it will be a thesis, but turns out instead to be a discussion of the method of the paper (“perceived and analyzed”). Every paper aims to present a better understanding of something; that is a given, not a thesis.

**From History of Art**

This paper’s intent is to compare Georgia O’Keefe’s giant flower paintings with Judy Chicago’s “The Dinner Party.” Comparison will be made between the two artists’ methods of depicting feminine sexuality and possible reasons for the two conceptions.

This is a statement of purpose and method, but comparison is a method of organization and development—not an end in itself. Note that there is no thesis; this paper seems to be a comparison for comparison’s sake. “Possible reasons for the two conceptions” suggests that the writer might have a thesis in mind, but the reader can’t be sure.

**From Anthropology**

While the various authors/compilers of fables accurately portray the story’s attitudes towards unnecessary conflict and violence, each author/compiler has some opportunity to advocate or excuse some acts that seem just as violent or unacceptable as others. The culture the fable comes from, and the time it comes from, have a great deal to do with the differentiation between “needless” and “justified.” However, some clearly similar themes do emerge when one examines in detail the function of violence in several fables.

A well-written introduction, this paragraph presents a good overview of the subject. But at the very last line, we see that there is no thesis: an overview through time is a summary. The writer needs an argumentative edge here—a point to be made.

**From Botany**

In this paper, the growth rate of Sequoia sempervirens (Coast Redwoods) will be compared with the growth rate of Sequoiadendron giganteum (Giant Sequoias). Environmental as well as genetic influences will be examined.

This introduction should be rewritten in the active voice and should include at least a hint about why this study is being conducted.
Active and Passive Voice

1. In English any action may be expressed in the active voice or in the passive voice. That is, sometimes the subject of the sentence performs the action indicated by the verb; other times, the subject is being acted on. Some examples will help clarify this:

   **Active**
   We conducted this study at Sage Hen Creek. (subject “we” doing the conducting)

   **Passive**
   This study was conducted at Sage Hen Creek. (subject “study” being acted on, being conducted, by someone else)

   **Active**
   The AXYC Company fired forty employees.

   **Passive**
   Forty employees were fired by the AXYC Company.

   **Active**
   Smith first observed this phenomenon in 1987.

   **Passive**
   This phenomenon was first observed in 1987.

2. The passive voice is useful when the agent (doer) of the activity is indefinite or unimportant:

   Computers are used in many industries.

   The topics covered by this guide include...

   Shots were fired.

3. The passive is also appropriate when the result or the activity is more important than the agent who performed it:

   These statistics are drawn from twelve regional studies.

   This configuration is commonly called a figure eight.

4. In most other situations, however, you should rewrite your sentences in the active voice. Do not allow an overabundance of passive constructions to rob your writing of directness and clarity, or to turn actions into spontaneous events that unfold without any agent or actor. Notice how the following passive constructions only invite questions about what actually happened:

   A change in policy was authorized. [Who authorized it?]  

   It has been determined that... [Who determined it?]
Predication

A predication is the core assertion of a sentence—the statement being made about the person, place, object, or event that is the subject of the sentence. In general, the emphasis of a sentence should fall on the subject, and the predication should be as strong and clear as possible.

Weak Predication

One type of weak predication results from the use of impersonal constructions: there is, there are, it is. These constructions fill the key opening slot of the sentence without saying anything, and they are wordy as well.

Weak
It is worthwhile to reexamine Smith's results.

Stronger
We can profitably reexamine Smith's results.
Smith's results are worth reexamining.

Deferring the main point of a sentence by making something else the subject also produces a weak predication.

Weak
I think that Lamarck is underrated as a force in scientific thought.

Stronger
Lamarck is underrated as a force in scientific thought.
The scientific community still underrates Lamarck’s contributions.

A final type of weak predication arises from the overuse of the verb “to be.” Whenever possible, substitute a more vivid verb for am, is, are, or were.

Weak
I am in receipt of the new information, and it is very interesting.

Stronger
I have received the new information, and it greatly interests me.
The new information I received greatly interests me.

Predication Errors

Predication errors arise from faulty logic or conceptualization. Think carefully about the following examples.

Incorrect
In the cerebellum is where we find two cerebral hemispheres.
The Unified Field Theory is an example of hard work.
A legal holiday is when you don't have to work.

Correct
The cerebellum consists of two cerebral hemispheres.
The Unified Field Theory is the result of hard work.
A legal holiday is a day when most people don’t work.
Marking Symbols

**AGR (subject-verb or noun-pronoun agreement)**

- Theories of cosmology suggests that the universe must have more than three dimensions. ("Theories... suggests" not "suggests")
- Each of the reservations throughout the United States have problems. ("Each... has" not "have")

**F. COMP (faulty comparison—either incomplete or mixing apples and oranges)**

- Thin metal strands deposited in a silicon wafer make it better. ("better" than what?)
- The marriage laws in Massachusetts are more explicit than Pennsylvania. (You can't compare laws with a state. So say "than those of Pennsylvania" or "than Pennsylvania's.")

**FRAG (sentence fragment)**

- The Island of Sicily, during the heyday of the Greeks, with its temples some of the finest outside Greece itself. (needs a verb—perhaps change the last part to "has some of the finest temples outside Greece itself.")
- The virus may be handled in the laboratory. But only with care. (The second part is a fragment. Just connect it to the first part with a comma.)

**GR (grammar—misuse of tenses and confusion of parts of speech)**

- Some historians react too quick to new information. ("too quickly")
- Ever since Quagmire Chemical Company requested a heat exchanger, we investigated several options. (with "ever since" you need to say "have investigated")

**ID (idiom—usually a misuse of prepositions)**

- The Human Subjects Committee insisted to do it their way. ("insisted on doing it")

**MOD (modification—usually a word or a phrase in the wrong place)**

- Traveling up the river, the jungle looked black to Kurtz. (Dangling modifier. "Traveling" here refers to "jungle." It should refer to "Kurtz": "As Kurtz traveled up the river, the jungle looked black to him.")
- Incinerating industrial wastes can produce compounds toxic to humans such as dioxins. (Misplaced. Sounds like the humans are dioxins. Should be "can produce compounds, such as dioxins, toxic to humans.")

// **STR (parallel structure)**

- The vaccinia virus may be used to vaccinate against small pox and as a carrier of genetic material from one organism to another. (All items in a series must be in the same form: "...to vaccinate...and to carry")
- Writers reveal themselves through their characters and using certain locales. ("through their characters and locales")

**PASS (passive voice—not always bad, but overused)**

- Short stature and low IQ can be caused by an extra chromosome. ("Short stature and low IQ" is the subject, but is not "doing" the verb. Something else is acting on them. That's why it's called passive. Make the subject do the acting: "An extra chromosome causes....")
- The "Madonna" was painted by Munch in one of his dark periods. ("Munch painted the Madonna...")

**REF (reference—faulty or vague)**

- Some people wrongly consider Leonardo da Vinci to be greater than Michelangelo, but he was very talented. (Which one does "he" refer to?)

**RTS (run-together sentence)**

- The meteor impact site in the Indian Ocean is the best possibility at the moment, however, other sites do exist. (semicolon or period needed before "however")
- This doesn't refer to World War I, it refers to World War II. (semicolon or period before "it")
How to Develop an Idea

One of the most common (and probably unhelpful) comments on student papers is something like the following: “This is an important point, but you need to develop this idea.” What exactly this statement means is often a mystery. It helps if we remember that the reader does not share our thought processes; often we simply need to make those thoughts explicit, laying out the details and ramifications of our statement. Below are two versions of a statement from a paper, one not developed at all, one more fully developed.

**ORIGINAL**
In this section of Oliver Sacks’ *Seeing Voices*, we learn that the Deaf actually have a culture of their own.

**REVISION**
In this section of Oliver Sacks’ *Seeing Voices*, we learn that the Deaf actually have a culture of their own. They are not simply a group of unrelated people who happen to have in common just one thing: that they cannot hear. That is, they are not, perhaps, like paraplegics, who beyond their disability and the attitudes and struggles connected with it (which of course may be a great deal in common), have little in common as individuals. Rather, those who are deaf, because they use a language different from ours, and one that is not shared by many outside their group, are effectively a separate cultural group as surely as African Americans or Asian Americans. The culture of the Deaf comes with a separate language, with customs, with social norms and rules, and most important, with a sense of its own separateness.

The first version assumes that the reader knows what it means to have a unique culture. The second one lays out the elements clearly. In fact, the first statement has now become the topic sentence for the whole paragraph. In order to expand on the idea, the writer has done several things:

1. Contrasted the Deaf with other, seemingly similar, groups that do not constitute a culture (that is, paraplegics).
2. Compared the Deaf with other, seemingly dissimilar, groups that do constitute a culture (that is, African Americans or Asian Americans).
3. Explained what some of the elements of a culture are (that is, customs, language, and so on).

It is important to note that the revision contrasts, compares, and explains without using phrases such as “They can be compared to...” or “The elements of a culture are...” Such phrases are OK, but they hit the reader over the head, and as we see, we can often eliminate them.

This revision has not exhausted the possibilities for expansion of the idea. Contrasting, comparing, and explaining are just some of the ways to expand. Providing an example, telling a short anecdote, and giving a definition are a few other ways. Here, more could be said about language as the key element. Or perhaps the paragraph could lead to discussions in further paragraphs about the civil rights struggles of the Deaf and its similarities to other civil rights struggles.

These are just a few of the ways you can take a little idea and expand it into something that will satisfy the reader’s greatest desire—to learn something.
What to Do When You Get a Paper Back

If you're like most students, you skip to the end of the paper when the instructor returns it. You look at the grade: a B or higher, and you read through the comments happily. Anything lower than a B, and you look through them with a chip on your shoulder. And in either case, you usually ignore the comments in the margin. If you look at them at all, you may notice such things as “wrong word,” and so on. But you don’t really take the time to figure them out. For your own sake (that is, to learn something), you might take a new approach to this subject. After all, the instructor must have had a reason for putting those marks there.

**THE GENERAL RULE:** Consider the instructor’s comments to be part of a dialog and respond in writing to those comments. Respond on the paper itself, right next to the comments themselves, but if you can't tarnish your work this way, do them on a separate sheet.

**Examples of Marginal Comments and What to Do with Them**

- **Awkward.** Don’t say to yourself, “Oh, awkward, huh? Well, that's not so bad.” Often the sentence will contain an error of some kind, in diction, or grammar, or structure. Try on the spot to rewrite the sentence or phrase. On rare occasions, it may be just that—awkward; but assume otherwise.

- **Wrong Word/Word Choice.** Try to figure out what word might have worked better, and write it down above the incorrect one.

- **Do You Mean…? Isn't This…? Why?** Such questions are attempts to get you to think about what you've said or to explain more fully. Your first response (a huffy one) may be, “No. I didn’t mean that,” or “No, this isn’t....” Try to write out a reply assuming at first that you need to examine the issue more thoroughly. Only after you’ve made this attempt, and failed, should you go to the instructor for clarification.

- **Grammar Errors.** Simply try to correct them when they occur.

Responding to marginal comments will not only help you learn the ropes, but also help you focus any questions or comments if you go over the paper with the instructor.

**End Comments**

Usually end comments often involve larger issues—development and organization—and do not lend themselves to making changes on the paper. You’ll use them when you revise the paper. However, you can do some work with them. Examples: “In your introduction, you might do x and y.” Go ahead and try to revise the introduction. “The middle section of the paper seems confused.” Go to the middle section and outline your points to see if all related points are in the same paragraph and if the paragraphs fit together properly.

Once you've given yourself 24 hours to study and attempt to respond to the comments, you can go to the instructor with specific questions, and not as a fire-breathing beast who demands to know why this isn't a perfect paper. You’ll already know how to improve.