The first major writing assignment is a paper on some aspect of the human mind and its relation to some major issue in the humanities, arts, or social sciences. Your topic must meet two requirements.

First, there must be a substantial body of empirical research on the topic (conforming to the methodological standards of psychology, as outlined in Chapter 2 of Gray, which is required reading).

Second, the topic it must be relevant to some issue in society, politics, the arts, religion, philosophy, education, law, or related fields.

Papers that speculate or debate some issue without discussing relevant research from research psychology, and papers that are just reviews of a scientific literature, without discussing their implications for the humanities, arts, or social sciences, are not suitable for this assignment.

You can flip through the textbook, come up with a topic that interests you, or talk to me or your TA to find a suitable topic. Here are some possibilities:

- perception and the reliability of eyewitness testimony in court
- memory and the reliability of recovered memories of sexual abuse
- genetic influences on behavior and their possible abuses in eugenics
- the effectiveness of psychotherapy, how it compares to drug treatments, and whether it should be covered by health insurance
- the source of dreams and how their relevance to psychotherapy, religion, and/or literature
- the nature of learning disabilities and whether they should be treated like physical handicaps in the university and the legal system
- the treatment of schizophrenia and its relevance, if any, to homelessness
- the nature of human rationality and its implications for social and political decision making (e.g., should nuclear power plants be built, because people’s fears of their dangers are exaggerated?)
- the psychology of language and its implications for the teaching of reading
- language and thought and its implications for reforming the language (e.g., eliminating sexist terms)
- brain chemistry and its implications for drug policy (or for future drugs that might improve mental functioning)
- the sources of homosexuality and its implications, if any, for gay rights
• the source of male-female differences in some psychological ability and its implications for gender-based affirmative action
• the nature of child development and its implications for programs directed at children.
• the causes of violent behavior and their implications for the insanity defense in court
• the psychology of hearing and its implications for the development of Western (or non-Western) music

There are countless other possibilities.

The paper should summarize what we know about the topic, a bit like a brief encyclopedia article, a beginner's guide, or an introductory lecture. Imagine that you are writing it for an intelligent, educated person who is not an expert on the topic (and hence does not know the literature or any of the jargon) but who wants to be taught the fundamental facts and open questions. Don't write it as if you were answering an exam question, where the reader already knows the facts and you are trying to prove that you know them, too.

Then the paper should raise some important question in the arts, humanities, and social sciences. There literally should be a question (an interrogative sentence ending in a question mark) in your paper which poses some important problem for our understanding or treatment of humans in society or of their artistic creations. You should then indicate how the knowledge from psychological research answers, clarifies, reframes, or adds insight to the question.

The review of the psychological literature should take up about half of the paper; the discussion of the problem and how psychological research bears on it should take up the other half (more or less).

The paper and a one-page preview of the paper is due in section. It should be about six to eight pages (1800-2400 words) long.

PLEASE SEE THE END OF THE HANDOUT FOR OUR POLICY REGARDING LATE PAPERS!!!

Research

TA's will introduce you to the library resources available to you to help you write the paper. They and their colleagues will also be available to help you at the humanities library.
When discussing the research literature in psychology, you must base your summary primarily on articles or books written by people who do research on the topic you are reporting. The sources may include:

- trade books -- the kinds of books you would find in the science section of a bookstore
- articles in the popular science press, such as *Scientific American, Discover*, or *Psychology Today*, as long as they are by researchers, not just journalists
- review papers in literature review journals like *Psychological Bulletin, Annual Review of Psychology*, and *Current Directions in Psychological Science*
- review chapters in edited volumes devoted to a topic (e.g., a collection of papers by different researchers on sleep)
- review chapters in handbooks to a field, such as Michael Gazzaniga's *The Cognitive Neurosciences*
- professional books devoted to the topic (e.g., a book on recent progress in sleep research written by a sleep researcher intended for other sleep researchers).

When discussing the psychological literature, the following general sources may be used to spark your interest in a topic or to suggest material that you want to cover, but they cannot be the only sources you use:

- articles in the popular press, like *TIME, Newsweek, The New York Times*
- Gray's *Psychology* or other introductory textbooks
- articles in general encyclopedias such as the *Britannica*
- pop books by journalists or freelance writers

What about material on the World Wide Web? That depends on what kind of material it is. Of course, if a scientific journal or magazine is simultaneously published on paper and on the web, it's fine to use the web version (as long as it's the full text of the article, not just a summary). A few journals are published only on the web and not on print it's OK to use those, too, as long as they follow the guidelines I listed above (that is, they are written and selected by scientific researchers). Reprints of articles (e.g., on someone's home page) are OK if they have previously been published in one of the acceptable outlets listed above. However, material from home pages, informal discussion groups, company sites, and other sources without any form of quality control are not permissible. When in doubt, check with TAs’ or me.

For the discussion of the implications of the topic for some larger issue, you should also refer to the primary research literature – to the writings of people who have done research and/or given thought to the question you are raising. You may supplement that discussion with references from more popular sources such as newspapers, magazines, and web sites if they are directly relevant to the question.
Whatever your topic in psychology is, you can bet that every year hundreds or thousands of original research papers come out that are devoted to the topic. If you go straight to the primary literature (articles that present research for the first time, primarily for the benefit of other researchers), you are in danger of dwelling on a tiny and idiosyncratic corner of your topic. It's fine if you read and cite primary studies, but only after you have gotten an overview of the topic from a secondary source such as a review article or chapter.

You should read and cite a minimum of seven sources.

**Citations**

Pretend that you are writing for a skeptic who thinks you are a liar who makes up facts, and who is determined to expose you. Every time you state a fact that is not completely obvious (e.g., "Humans have two eyes") you have to cover yourself by citing the source from which you learned the fact, so that your skeptic can look it up and be satisfied that in fact you did not just make it up.

The format for citations in psychology papers comes from the Publication Manual of the American Psychological Association and works like this. Let's say you read the following passage on page 383 of *How the Mind Works*:

> In 1978 a rumor circulated that McDonald's was extending the meat in Big Macs with earthworms. But if the corporation were as avaricious as the rumor was meant to imply, the rumor could not be true: worm meat is far more expensive than beef.

And let's say that for whatever reason, you want to mention the fact that worm meat is more expensive than beef. You could write:

> Worm meat actually costs more, pound for pound, than beef (Pinker, 1997).

**OR**

> According to Pinker (1997), meat from worms is more costly than meat from cattle.

Your reference section (bibliography) would then contain a full explanation of what "Pinker (1997)" refers to: the author's full name, the title of the book, and the publisher's name and city. Note that in both cases you have paraphrased Pinker, you have stated the same fact, but in different words. But now let's say you found Pinker's words so perfect or so pithy (or found yourself so tongue-tied or blocked) that you could not think of a better way to express the idea, and wanted to reproduce his very words. You would write:

> Pinker (1997, p. 383) wrote, "Worm meat is far more expensive than beef."

**OR:**
Few people are aware that, as Pinker (1997, p. 383) has put it, "worm meat is far more expensive than beef"

The quotation marks and attribution of the source indicates that the words are not yours. If you use someone's exact words without enclosing the words in quotation marks and telling the reader who wrote or said the words, you have committed plagiarism, the academic equivalent of theft. People who plagiarize will fail the course and will be reported to the Committee on Discipline.

When in doubt, cite. When in doubt, put it in quotes. When in doubt, ask your TA or me.

In addition, you must indicate, next to each article or book you reference, where you found it (which library, bookstore, etc.). Attach to your paper a photocopy of the first page of every article or book you reference. This will allow us to check the suitability of the references, and also comes in handy (for you and for us) if suspicions of academic dishonesty arise.

Other Issues on Academic Honesty

MIT’s academic honesty policy can be found at the following link:
http://web.mit.edu/policies/10.0.html

Format

Use the format of the Publication Manual of the American Psychological Association, which is available on reserve at the Humanities Library and can be purchased from most bookstores. A crib sheet used to be available on the web, but was removed for copyright reasons. That site still has useful links to other guidelines for writing in APA style.

Note that you should make your paper look like a published APA article, not a manuscript submitted to an APA journal for publication. That means that footnotes should be at the bottom of the page, not the end of the paper, and that tables and figures should be embedded in the text, between paragraphs, not stapled to the end of the paper. References (bibliographic sources) should be at the end of the paper; they should not be in footnotes.

You should make liberal use of headings, subheadings, and if needed, sub-subheadings. They look like this:
A Major Heading

A Subheading

A sub-subheading. Note that the sub-subheading runs into the first sentence in the paragraph.

Obviously, because you are not reporting original research you have conducted yourself, you will not have any sections corresponding to Method, Subjects, Procedure, Results, and so on.

An easy way to make your paper conform to APA guidelines is to copy the format of a paper in an APA journal.

The paper must be typed or word-processed, double-spaced.

Organization

Don't begin to write until you have made an outline. Use the outline to make headings and subheadings (again, use the APA format), which will help you to write it and will help your readers to read it. Do not just dump a collection of facts into the reader's lap; ask a series of questions to which your facts are answers, first the focused scientific research questions, then some question in the arts, humanities, or social sciences.

Style

The TAs will not primarily be grading your paper for writing style, but you should make every effort to write well. If your paper is well-written the TA will have an easier time understanding what you are trying to say, will be less grumpy when assigning a grade, and will be more impressed with the level of care and effort you put into the paper.

Also, many of you will be submitting the paper to satisfy Phase I of the MIT writing requirement, and the Writing Program will be grading the writing style. Finally, remember that you will have to re-write the paper in light of your TA's comments and submit it as the second assignment for 9.00. The better the writing is now, the less work you'll have to do later. Put your paper through at least one extra draft in which your only goal is to make it easier to read.

Advice

Here is a good general strategy in writing a paper:
1. Read your articles and take notes. Taking notes forces you to understand the material more thoroughly than highlighting or just reading. You may, however, find it helpful to read each paper twice: once without doing anything else, just to get a feel for what the paper is saying, and a second time to take notes.

When you take notes make sure you indicate what you are paraphrasing and what you are copying verbatim. Many cases of plagiarism arise when the student copies a source verbatim into his or her own notes and then copies the notes directly into the paper, forgetting that they were copied word for word from the original source.

2. Review your material. Read over your notes, or skim the articles you have read, noting the main points you find interesting and think you may want to include in the paper. Write them down.

3. Cluster. Group together the points (ideas, findings, theories, experiments, etc.) that seem to be related to one another. You should end up with anywhere from four to a dozen clusters. If the clusters are too big, divide them into smaller clusters. If one cluster seems to be related to another one, group them into a bigger cluster.

4. Organize. Make a hierarchical diagram of your clusters (small clusters grouped into bigger ones grouped into still bigger ones). At every level of the hierarchy, put the clusters into some kind of order that tells a story. For example, "Infancy -- Childhood -- Adulthood -- Old Age" goes from young to old. "Hemisphere -- Lobe -- Region -- Column" goes from big to small. "Perception -- Recognition -- Deduction -- Action" from beginning stimulus to response. This should give you an outline for the paper.

5. Write. Write a first draft. You don't have to write the sections in order. You don't have to fill in every section. Just get something down on paper.

6. Rewrite. Fill in the missing sections, paragraphs, or sentences. Reorder them. Look up missing information or facts you feel you may have gotten wrong. Flesh out incomplete sections, or delete digressions and irrelevancies. Repeat Step 6; the more times, the better.

7. Polish. Once you have the content of the paper in place, change every paragraph and every sentence to make it read a little better. Omit needless words. Smooth out the transitions among sentences, paragraphs, and sections. Repeat Step 7; the more times, the better.
**Assistance in Writing.** Many students benefit from instruction in writing skills. The Writing Center at MIT has engaged a tutor who is dedicated to helping students with their 9.00 papers. You are encouraged to consult with the tutor or with other experts at the Writing Center. Remember, the quality of writing and organization in your papers can make a big difference to your grade, and you may be using the paper to satisfy the Writing Requirement.

**Preview**

You are required to submit a one-page preview to your TA before the paper itself is due. This will allow us to confirm that you have chosen a suitable topic, that you are organizing the paper in a reasonable way, and that you are looking at the right kinds of sources. It will also encourage you not to do all the work for the paper the night before it is due.

The preview should be one page. It should consist of the following:

1. A prose paragraph introducing and explaining the topic and one of its major implications. It can later be used as the first paragraph of your paper.

2. A brief overview of the specific things you will be writing about. It can include questions you hope to answer, topics you will cover, and nifty phenomena you have come across that you will be explaining. An outline of the paper (that is, a list of your headings, subheadings, and sub-subheadings) is an ideal way to organize this part.

3. Citations for two or three of the sources you have looked at so far.

Obviously the final version of the paper will depend on many decisions you will make when writing the actual paper, so you won't be committed to following your outline to the letter. It should, however, give your TA a reasonably good preview of what to expect. If for any reason you have to change your topic between submitting the preview and submitting the paper (not something we recommend!), you must consult the TA first.

Remember, the preview should be handed in at your section. You will be graded on it; the grade is separate from the grade for the paper.

**Length**

Six to eight pages
1800-2400 words.

**Late paper policy.** Papers are due at the beginning of section.
Mini-assignments that are late will get a grade of zero. Papers that are late will be subject to a late penalty of two points (about one letter grade) per day. A little arithmetic will show that getting a zero for a mini assignment, or losing points for a paper, will have a good chance of lowering your letter grade for the course as a whole.

The late penalty will be waived only in cases of sickness, conflicts, or other emergencies, and only with a letter from the Office of the Dean of Students. Associate Dean of Students and Section Head of Counseling and Support Services ordinarily handles these requests.