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21W.777 The Science Essay
Spring 2008

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Homework #4

Due next class, Th 2/21

ESSAY 2: HOME SCIENCE (750 WORDS)

Science and technology are not just concepts we visit in labs and in books; they are all around us, shaping the world we live in and the way we see that world. Here is an opportunity to satisfy your curiosity about the science of something close at hand, something we encounter every day but to which most of us are blissfully oblivious. Write 750 words (2½-3 pages double-spaced, with 1-inch margins top and bottom and 1¼-inch margins left and right) on an aspect of “home” science or technology that you would enjoy sharing with readers. Though you will have to do some research, this is not meant to be written as a research essay. That is, you will not use formal citations. You will keep quotes to a minimum and mostly summarize or paraphrase your sources, just as if you were writing for a general interest magazine.

Here are some possible topics:

- How my cell phone, TIVO, watch, eyeglasses work(s).
- Chemistry of making bread, wine, cola, or grilling steak, or . . .
- Why my dog likes to play catch; why my canary sings.
- Materials engineering and/or physics of my tennis racquet, razor scooter, skateboard, or golf club.

This essay must be accurate and clear—but that’s just the beginning. You aren’t writing a technical manual but, rather, an informal essay. Therefore you must fascinate your reader, keep her or him reading. Your tone may be earnest or amusing, but you must convince readers that your topic matters. Some suggestions:

- Begin by choosing a topic that genuinely interests you: if you aren’t interested, your reader won’t be, either!.
- Form a question or a series of questions about your topic to make your research efficient and to give your essay a shape. For example, “Why does barbecued meat taste so good? What makes it taste different than meat cooked on a stove?” or “What allows my watch to tell time accurately? What makes it waterproof?”
- Note that *you aren’t writing a history of the science or technology involved—you are explaining how something works.*
- As you write your essay, you will want to present your information in a way that makes it easy for the reader to follow.
- To make your subject easier to grasp and to interest readers, you will probably want to begin your essay with an anecdote or a problem from personal experience. You may continue to use personal experience in your essay if it helps you relate your ideas to readers. You may also find metaphors or analogies useful in explaining your topic.

About sources: When you draw on sources for your essay, you must use your own language, not theirs. If you cannot summarize or paraphrase (i.e., significantly change the wording) then use quotation marks and name the source in your text. For example: As the *Engineering Handbook* says, tensile strength “is best defined as . . .”. DO NOT, however, use lengthy quotations—they will spoil the tone and rhythm of your essay. *For my information, please attach to your essay a list of your sources.*