

**ASSIGNMENT 1**  
(due Tuesday, Sept. 20, 2016)

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READING

Carefully read the on-line article “The Science of Scientific Writing” by Gopen and Swan. This can be found linked to the course website  
Alternatively, you can go directly to

<http://www.amstat.org/publications/jcgs/sci.html>

Be prepared to discuss this reading in class.

Carefully read Chap.1 of *The Mayfield Handbook*, through Sec.1.1.5 (i.e., pp. 3 – 8). Be prepared to discuss this material in class.

Skim briefly through the remainder of Chap.1 to familiarize yourself with the structure of the chapter.

Carefully read, and be prepared to discuss, all of Chap.5 of *The Mayfield Handbook*.

WRITING

Write a 350 to 500 word statement answering one of the questions below. You should choose a question to which you already know the answer; the purpose of this exercise is not to teach you technical material. Your grade will not be affected if you make small technical errors in your answer. (If your answer is wildly wrong it will be difficult to judge the clarity of your writing, and your grade *will* be affected.) If you do not feel confident to answer any of the questions below, use your judgment to make up an “equivalent” question that would be plausibly asked by the intended reader (see below).

The purpose of your statement, and the intended reader, are the same as for the in-class writing assignment of September 14. The reader is a literate, educated adult with a nontechnical background. The adult needs an explanation, at an appropriate level, in order to progress in reading for a course. You may use numbers and you may use technical terms and mathematics (very very carefully!), but everything you use should be consistent with the level of the reader and the intended purpose of your statement.

In framing your statement/answer you must make decisions about what elements to use to optimally accomplish the task. You might use examples, you might use enumeration, etc. You might decide that your answer will be

improved if you use material that is only indirectly related to the question. You should consider whether your answer will be better if you make it concise (350 words) or will benefit from the material that can be added if you lengthen our answer (500 words). Such judgments are all part of the writing process.

Your statement must be in 11 or 12 point standard font (e.g., not italic) and is to be typed double spaced, with side margins of at least 1 in. and top and bottom margins of at least 1.5 in.

Don't forget to give a title to your statement.

#### Questions

Why is a transmission needed in an automobile?

How is gel electrophoresis used in genetics research?

Why do acoustical engineers measure sound intensity in decibels?

What is an irrational number?