

### **Writing Assignment #3: the technical report**

This assignment is a document in the form of a technical report. Depending on where you go from here you may encounter something like this as an internal report in an engineering firm or something like a scientific paper in a research setting. Either way, the core elements of this work are the effectively the same.

Your goal for this work is to pick a particular physics subject (technical, not historical) and argue a point. To do this you will need to read at least three sources to develop a sense of the questions that are being asked in the studies.

This assignment will build toward conclusion with multiple sub-assignments. We will take a staged approach toward convergence to good writing starting from a rough draft and progressing through two rounds of revisions. Your work will be graded using the “contract grading” scheme where you will get set points for completing the assignments on time.

#### **Sub-assignment #1 (10%)**

**DUE: September 27**

Read this assignment definition and review the provided manuscript template file. Your first sub-assignment is to develop a grading rubric that identifies what you believe to be the main elements of this project and the specific style components essential to writing a technical report. In essence, show me that you understand the goals of this work and what you need to do to be successful.

#### **Sub-assignment #2 (10%)**

**DUE: October 4**

Identify your topical area, three peer-reviewed articles (or books or other legitimate source), and the central question you will be addressing in your technical report. I may provide feedback to you and ask you to resubmit if I believe that your sources or question need to be changed.

#### **Sub-assignment #3 (20%)**

**DUE: October 25**

Rough draft: This first pass at the writing is meant to be rough and meant to get you moving so that you have something to edit. No work that is decently written ever gets to final draft in one go. This whole project is about the revision process, and therefore you will start with something to revise. The point here is to make sure that your paper has the essential elements in it. You will not be graded on the clarity or exquisiteness of your writing, but on the inclusion of the structural components. My comments will focus on the big picture, but understand that this is not an endorsement of the writing *per se* and you are expected to revise and improve the entire report.

#### **Sub-assignment #4 (20%)**

**DUE: November 15**

1<sup>st</sup> draft: You will be graded on the improvement of your paper compared to the rough draft (I need you to submit both for comparison). Comments on this draft will focus more on grammatical issues and finer details and are intended to lead you to a finished product.

#### **Sub-assignment #5 (20%)**

**DUE: December 6**

2<sup>nd</sup> (and final) draft: You will be graded here on the extent to which you have revised your manuscript based on feedback on your first draft.

**Supporting work:**

Completing the prior sub-assignments on time and according to the feedback provided means that you can earn a maximum of 80% of the total project value. The remaining 20% can be earned by writing two brief assignments that are external to the core writing project. These are meant to be self-reflective pieces where you consider your writing through the lens of the revision process.

**Supporting work #1 (10%):**

A one-page reflective essay of the process of revision based on your discussions at the Writing Center. You must include the date and time of your appointment and the name of the person with whom you met.

**Supporting work #2 (10%):**

Writing is a painstaking process, for everybody. None of my writing was ever good on the first go. This supporting work is a document that shows me how you took feedback from your first draft and revised your work through multiple (at least three) iterations of a statement. The point here is that you likely need to revise a sentence or collection of sentences multiple times in order to achieve something that can be considered good writing. In addition to a record of the multiple revisions, you must also provide commentary on your decisions for each of the revisions. Please see the accompanying document that provides an example of a real iterative writing process that I engaged in, starting with an outline of ideas and concluding with a (perhaps) acceptable abstract.

**Penalty for late submissions:**

Each sub-assignment will be reduced in value by 5% (of the total) for each 3 days that the assignment is late, rounded up. For example, if you hand in sub-assignment #3 two days late, this would decrease its value to 15%.

**Formatting:**

You should use the provided template file, which has the following formatting conditions included:

1. 5 pages of text, not including the figures and references (on separate pages at the end)
2. Includes abstract, introduction, body sections, conclusions, figures, and references
3. 1" margins all around
4. Standard font selections: Times New Roman 12 point
5. 1.5 line spacing
6. Figures must include a caption with a numerical reference
7. Equations must be referenced as indicated in the template file.
8. A minimum of three citable references.
9. You must properly cite statements in the paper that are not your own. Note that this includes things that are not exact quotes. You do this anytime you take an idea that is not common or your own.