UNIT 2: Technical Descriptions

**Goals:**

During this project you will learn:

* How to navigate the difference between plain style and persuasive style
* How to adjust the layout of a document to allow for a large amount of information to be communicated clearly in a limited amount of space.
* How to choose appropriate graphics to aid technical documentation.
* How to account for a variety of readers and conditions in the creation of your instructions.

**Overview:**

*Technical descriptions* of products and processes are an important part of technical communication. The purpose of a technical description is not only to help your audiences understand what something is or does (which is the province of definition), but to help them see--literally--how something functions. To this end, descriptions use visual detail, both in pictures and in words, to describe both the physical object or process and how it works.

Technical descriptions are not a one-size-fits-all genre. Each audience will need specific information about particular parts, functions, and purposes in order to understand the description (and hopefully take action). In this project you will be asked to compose two technical descriptions on the same subject for two different audiences.

**Assignment Process:**

*Topic Selection*

First, you will choose an object or a process with which you are reasonably familiar and describe it to the audiences. If you are choosing a process, the process must be one that is not accomplished through direct human action (that would be instructions). In other words, you can describe how blood circulates; you cannot describe how to make a free throw. You may choose something from your chosen major/profession, or you may choose something from a hobby or interest. Examples might be a camera, a hard drive, the human heart, the metabolic process, or a television.

Past Successful Topics Include:

* The AV 88 Harrier II “Jump Jet”
* The Bostitch RN46 Coil Roofing Nailer
* How NSAIDs Find a Headache
* Helicobacter pylori
* Project ARA (Google’s modular smartphone)
* The Process of Alcohol Metabolism
* Rice Cookers
* Ancient Chain Mail
* Guinness Beer
* The Process of Muscle Soreness
* The Propulsion Process of the V-22 Osprey

*Audience Analysis*

Next, you will choose two specific audiences to write tailor your technical descriptions toward. One should be a “technical” audience made up of those who already have some understanding of the product or process. This specialized audience could be people who share with you a very specific area of specialization within a field, or it could be a broader audience within that field. The second targeted audience should be “non-technical” meaning that they have little to no background knowledge of your subject. This audience may include parents, DIY-ers, children (specify the age range), or any demographic that might have a need to understanding the product or process.

*Two Technical Descriptions*

Finally, you will write 2 technical descriptions (1 to each audience) over the course of 4 weeks. Your descriptions should answer the following questions:

1. What is it?

2. What does it do?

3. What does it look like?

4. What is it made of (physical objects only)?

5. How does it work?

6. How has it been put together?

7. Why should your reader use it?

You will not necessarily answer these questions in an orderly manner, but each of them should be addressed if they are relevant to your description.

Your descriptions should also have the following elements:

• Sense of the overall object or process, including why it is significant for the audience

• Clear explanation of each part's function

• Details appropriate to the audience's interest and level of knowledge

• Clear and appropriate organization, which will likely be one of the following types:

1. Spatial organization, when you want readers to visualize the mechanism or process as a static object (e.g., house interior, document, disk box)
2. Functional organization, when you want the reader to see a mechanism or a process in action (e.g., camera, smoke detector)
3. Chronological organization, when you want the reader to see a mechanism

The approximate total length for each description is 1200 – 1600 words. As always, please cite your sources.

*3 Professional Memos*

As with the previous unit, you will be asked to compose 3 professional memos to keep me informed of your periodic progress on this project.

**The Flexibility of the Project**

Much like the job documents unit, I intend this unit to connect to your future occupations. Both of the technical descriptions should afford you the opportunity to write within the subject area of your discipline.

**Grading and Timeline**

Grading for this project will be based on your ability to tailor your documents to each specific audience, both in the textual and visual composition of your materials. Likewise, the effectiveness of these documents will hinge on your ability to write in a clear and concise fashion.

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| **Document** | **Points** | **Due Date** |
| Technical Description 1 Draft | 10 | July 10th |
| Technical Description 2 Draft | 10 | July 17th |
| Technical Description 2 Final | 75 | July 22nd |
| Technical Description 1 Final | 75 | July 22nd |
| 3 Memos | 30 | Jul 7th , Jul 15th , Jul 6th |
|  | **Total: 200 points** |  |