Short Report Information for CHM 125IN:

Two short reports are required as part of this course:

Each report will be on the chemistry of a consumer product (including over the counter drugs, but not prescription drugs) of your choice. The report may be a follow-up to class discussions, but must contain additional information beyond the class discussion and the textbook or supplemental readings. The products used for each report should be unrelated (e.g., not two different brands of shampoo). Ideas for topics can be found in specialized magazines such as Discovery, Scientific American, Invention & Technology, Smithsonian, or Popular Science (to name a few), a consumer magazine such as Consumer Reports or Consumer Digest, news magazines such as Time or Newsweek, newspapers such as The New York Times science section or The Arizona Daily Star (or other local or national newspaper), and the Internet. (Note: most magazines and newspapers have web sites that include news stories from recent issues, as well as news programs on television that archive their consumer product reports.) It can be on a products or products that you use.

The report should tell what the product, or products (if a comparison) are, the active ingredients (if applicable), how it was developed, how it works, and as much of the chemistry behind it that you can find. You may include comparisons between similar products along with your own comments on how well the product works from your experience, and any testing of the product (testing is not required). Information can be obtained from a number of sources including books, magazines, U.S. patents (Internet address: *uspto.gov*), and the Internet. You should contact the manufacturer of each product for information using their consumer telephone number, usually listed on the product label. (Note: Some consumer departments are quite good at supplying information, others will be of little or no help. Do not ask them too much information as they are afraid you may be a competitor trying to get proprietary information. It may take 2-3 weeks, or more, to get information through the mail, and, in some cases, the information never arrives.) If you are using the Internet, try looking for a web site from the manufacturer or under the product names on the Internet (try addresses such as *Tide.com*, *Tylenol.com*, etc.). Remember, this is a chemistry course and we do discuss a large number of consumer products as well as prepare and/or test some in the laboratory, so your report must go beyond the class information.

Finding Information

When researching a topic on the Internet, use a search engine such as Google (www.google.com). Start out with one or two key words, then, after checking, add additional key words or terms. Use the word "and" or a "+" sign to join key words together. You can also use sentences or phrases in your search. Precede phrases or sentences by the term "intitle:" if you are looking for the phrase in the title of the article, or "intext:" if you are looking for the phrase in the text of the article.

A word of caution. Information on the Internet ranges from excellent to inaccurate. Wikipedia, may be a good starting point, but the information has not always been checked or is occasionally modified by individuals with the purpose of reinforcing their own agenda. Web sites often quote directly from other sites and omit important information. Some writers will inject their own viewpoints, writing styles, and emphasis, producing misconceptions. It is important to cross check information on at least two independent web sites and, if the information is identically worded, check a third web site. There are always two sides to an issue, don't just choose information from one side, try to get opposing viewpoints.

Topics for the short reports must be approved by your instructor. This reduces duplication of topics and will allow your instructor to give you some guidance to help you to manage information. Failure to have your topic approved can result in your report being rejected for not fitting the objectives of the report.

Requirements:

The short report should be **five pages in length**, typed, and double spaced. (Do not quadruple space between paragraphs.) If you list ingredients in a product in a table, do not double space the ingredient list. The report may be longer than 5 pages, if required, to complete your information. (One or two sentences on page 5 does not constitute 5 pages of text.)

Margins should be no greater than one inch (2.5 cm), top, bottom and sides.

Type size should be no greater than **11 point**, except for headings. Use a standard type font (such as Times, Calibri, or Arial), don't search for the font that takes up the most space. Points will be deducted for large type size or extra wide character spacing.

Diagrams, chemical formulas, pictures, charts, and graphs may be important information to explain or illustrate your topic. These items are considered additional material and **do not count toward the five pages of text required** for the paper length. The diagrams, formulas, pictures, charts or graphs may be placed in the body of the text or added on separate pages at the end of the text. Don't forget to reference this material.

If you include lists of ingredients for a product or for comparison of products, do not double space this information. Such lists are best placed in a table with comparisons in side-by-side columns. If you do list ingredients, tell what their function is in the product, but weed out irrelevant information (e.g., calcium carbonate, used in stomach antacid tablets, is also used in concrete for building and road construction, or silicon dioxide, used as an anti-caking agent in some foods, is used in making glass).

The report must contain a bibliography:

Use three or more references, some of which should be fairly recent (within the past two years).

Use multiple sources. Do not restrict the information to different sections of a single web site or a single book or magazine.

Look for sources or review articles that may tell negative or unfavorable information about your topic, in addition to the positive information to obtain a balanced overview of your topic. **Do not believe everything you read**, you must apply some critical thinking to the information you find. There are a number of web sites that list negative information on almost any topic, take information out of context, and distort or exaggerate results of studies on processes or products. It is important that you check several independent, unrelated sources to evaluate these types of claims.

Put the information in your own words rather than copying directly from the reference or the internet.

Use footnotes or appropriate citations, where applicable, to acknowledge borrowed material, informing the reader of the source of statements or quotations, or for presenting explanatory or supplementary material not appropriate to the text. Not citing direct quotes or downloaded material is considered plagiarism and will result in a grade of zero for the report.

All sources used in the researching and writing of the report should be listed in the **bibliography**. Generally, the bibliography will be on page 6 of the report. The bibliography (and also footnotes, if you use them in your writing style) presents the following information:

For a book:

Author's name (last name first), the title of the book (underlined or in italics) including any series or volume number, the edition, if other than the first, the publisher, the place of publication (or home office of the publisher), the date of publication on the copyright page, and relevant page numbers. An example of a book reference is:

Saferstein, Richard, *Criminalistics, An Introduction to Forensic Science*, 7th Ed., Prentice Hall, Upper Saddle River, NJ, 2001, pages 228-257.

For an article:

The name of the writer, the title of the article in quotation marks, the title of the periodical (underlined or in italics), the volume number (underlined or in bold print), the date of the issue of the periodical, and the page numbers. An example of a magazine reference is:

Roger, J., P. Angel, and Neville J. Woolf, "Searching for Life on Other Planets", *Scientific American*, **274**, No. 4, April 1996, P. 60.

For Internet material:

The name of the author or publisher of the home page, the title of the article in quotation marks, the title of the magazine or journal or database (underlined or in italics), Internet address of the article, and the date the article or the home page was last updated. (The internet address, by itself, is not considered a valid reference.) An example of an Internet reference is:

Proctor & Gamble, "The Tide Fabric Care Network", http://www.pg.com/frameset_fs.jhtml?frameURL=www.tide.com, 2003

Please note that www.google.com is not an acceptable reference.

Internet references will be checked by your instructor. Failure to find and connect to an internet reference will invalidate that reference.

For unpublished material:

The name of the writer or individual (last name first), the title in quotation marks (if it is an article), and the date you communicated with them. If the information is relayed in an interview or by letter, tell the individuals professional position and use the term *personal communication* in place of the title. An example of unpublished information is:

Smith, John P., Technical Service Engineer, Nuclear Missile Company, personal communication.

Diagrams, charts, tables, and pictures may be included in addition to the text of the paper. They are best added as separate pages at the end of the report rather than trying to space them into the body of the text. **They do not apply to the five pages of text required for the report.** When referring to a table, write see *Table 1* (Roman or Arabic number may be used) and when referring to a picture or diagram write see *Figure 1*. Give credit to the source if the table or figure is not original.

Not citing direct quotes or downloaded material is considered plagiarism and will result in a grade of zero for the report. Please be advised that direct downloading of large sections of material from the Internet is considered to be plagiarism even with a citation listed at the end of the material.

If a proper bibliography is not included, the grade on the paper will be penalized by a minimum of 15 points. You may also be penalized points for improper references.

English Composition:

This is a chemistry course and the paper is on a scientific topic. You are, however, expected to write with proper organization, composition, spelling, and grammar befitting a college level report. It is suggested that you may want to have your paper reviewed by your English or writing teacher before completing your final product.

Binding:

A single staple in the upper left hand corner of the report is sufficient for binding the pages together. Fancy report covers, spiral bindings, and other types of bindings are not necessary and do not improve your grade.

Please submit two copies of your report. (One for your instructor's files.) If you submit an electronic copy, the electronic copy must be in Microsoft Word format or RTF format. A second, printed copy of the report must be supplied. **Points will be deducted if a second copy is not supplied.**

Report information and references may be checked by your instructor through a variety of Internet sources and resources. Please note that the college subscribes to turn-it-in.com, a service that checks papers against thousands of sources for plagiarism, as such, be sure to properly cite references for all information and quotations.

Grades are based on **content and accuracy** of information, **relevance to chemistry**, proper references and citations, and composition. Reports are evaluated "as is" and are not returned for correction or updating of information.

If the report is less than five pages long, you will be penalized 15 points for each page under 5.

If your margins or spacing are too large or your type size is too large, you will lose 10 points per violation.

Reports that are considered to be plagiarized (i.e., copied word for word from a source without proper references), or found to be provided or purchased from a term report organization, will be assigned a grade of zero. Depending on the severity of the violation, your instructor may, as his discretion, assign a grade of F for the course.

Late reports will be penalized:

10 points the first 24 hours.

An additional 10 points until the next class period.

An additional 20 points will be deducted until the third class period.

After that, a grade of zero will be recorded for the report.

The reports constitute 30% of your course grade. Failure to submit one report means your grade for the course will be no higher than a C. Failure to submit both reports means you will get a failing grade for the course.