

# GENERAL WRITING ASSIGNMENT GRADING SHEET & WRITING PRIMER

Writing assignments must be turned in by deadlines. **Read the WRITING PRIMER in detail BEFORE you submit your paper.**

## Grading:

For each fault in layout, grammar, spelling, content, concept, format, presentation, expression, design, citation, etc. (Be aware that repeat mistakes will count MORE THAN ONCE!) I will deduct one point from 100. Projects received by the “REDO” deadline can be redone and resubmitted by the “FINAL” deadline. I will average your two grades as your Grade. Work submitted past the FINAL SUBMITTAL deadline **will ALWAYS receive a 0% F. You have been warned!**

CHECKLISTS & FAULT EXAMPLES *Faults you can expect to be marked on your submitted paper.*

## Layout

**To avoid pitfalls in layout, use assignment template if available**

Checklist	Errors / Mistakes / Faults	Fault Codes
<input type="checkbox"/> Folder	Missing Folder	<i>Folder</i>
<input type="checkbox"/> Writing Assignment Grading Sheet in Front	Missing or out of place	<i>Sheet</i>
<input type="checkbox"/> Title Page (with Title, Name, Date)	Missing / Corrupt Title Page	<i>Title Page</i>
<input type="checkbox"/> HEADER on EVERY page includes:	Missing / Corrupt Header(s)	<i>Headers</i>
<input type="checkbox"/> Assignment Name		
<input type="checkbox"/> Student Name or Company Name		
<input type="checkbox"/> Page Number		
<input type="checkbox"/> Section Headings	Missing / Corrupt Section Headings	<i>Headings</i>
<input type="checkbox"/> Section Subheadings		

## Language

The following list is an example of common faults in language usage and attribution.

Errors / Mistakes / Faults	Examples with margin	<i>Fault Counts &amp; Codes</i>
Spelling: incl. capitalization errors & spacing	The mineral <u>florite</u> has a <u>mohs</u> hardness of four.   Nicolas Steno <u>__</u> was trained in the classical texts on science.	
Grammar: incl. punctuation, superfluous words, transpositions	Isometric crystals are also isotropic <u>Here</u> light propagates at the same speed.    Rocks are composed of many <u>many</u> <u>minerals</u> <u>mixed.</u>	
Style: incl. paragraph, repetitive expressions / words, erroneous expression / words, sub- or superscription, unprofessional style, word insertion	<i>Para.</i> ... in the geologic sciences. <u>¶</u> Near the end of the 19 <sup>th</sup> a new theory ...    <i>rep</i> ... is a <u>light colored</u> mineral. These <u>light colored</u> minerals are often <u>light</u> ...   Stalactites hang from the <u>sealing?</u> of a limestone cave.   <i>sup</i> The density of quartz is 2.65 g/cm <sup>3</sup> .    I was investigating the outcrop with <u>my</u> group.   Sodium sulfate forms a chalky, <u>incoherent</u> precipitate.	<i>amorphous?</i>
Sentence: incl. grammar, run-on, strings of nouns	The density of gold is greater <u>then?</u> the density of silver.   Pyrite has a symmetrical crystal <u>structure</u> , it is cubic.    <u>Skarn mineral zonation?</u> is apparent in the sample.	

## Content

Errors in content are spelled out. Severe infractions may count for multiple errors.

Errors / Mistakes / Faults	Examples with margin	<i>Fault Counter &amp; Codes</i>
Unclear / erroneous statements	<i>unclear, units?</i> Mohs hardness of the mineral in question is 16.5.	
False / nonsense	<i>Nonsense</i> <del>Glaciation cause severe metamorphism of the region</del>	

## A writing primer for professional writing assignments in Dr.K's courses.

**Given assignment templates will always supercede instructions in these general guidelines!**

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**Abstract** Unless the paper will be officially published, **do NOT** include an abstract for assignments given in Dr.K's classes.

**Body** **Depending on the assignment, the body could follow certain template styles and may not need the conventional paragraphs about materials and methods, results, etc. READ THE ASSIGNMENT CAREFULLY!**

**Body: Materials & Methods** OBJECTIVE: document all specialized materials and general procedures, so that another individual may use some or all of the methods in another study or judge the scientific merit of your work.

AVOID a step by step description of everything you did, neither describe a set of instructions.  
AVOID describing commonly found supplies such as test tubes, pipet tips, beakers, etc., or standard lab equipment such as centrifuges, spectrophotometers, pipettors, etc.  
AVOID listing manufacturers or suppliers of any specific type of equipment, apparatus, or chemical unless critical to the success of the method.  
AVOID all explanatory information and background - save for discussion.  
AVOID information irrelevant to third parties, such as what color ice bucket you used, or which individual logged in the data.

DO include specialized chemicals, materials, or any equipment or supplies that are not commonly found in laboratories.

DO refer to chemical solutions by name and describe completely, including concentrations of all reagents, and pH.

DO describe the methodology (not details of each procedure that employed the same methodology).

DO generalize - report how procedures were done, not how they were specifically performed on a particular day. Think about what would be relevant to an investigator at another institution, working on his/her own project.

**Body: Results** OBJECTIVE: present and illustrate your findings. Make this section a completely objective report of the results, and save all interpretation for the conclusion.

DO illustrate your results with figures and tables. Analyze your data. Develop figures first, then write results according to what is presented in your figure.

DO describe each of your results, pointing the reader to observations that are most relevant.

DO provide context, such as addressing a question by making a particular observation.

DO describe results of control experiments and include observations that are not presented in a formal figure or table, if appropriate.

AVOID discussing or interpreting your results, reporting background information, or attempting to explain anything.

AVOID including raw data or intermediate calculations.

AVOID presenting same data more than once.

AVOID repetition of information in text and figures. Text should complement any figures.

**Citation**

- List all literature cited in your paper, in alphabetical order, by first author.
- Be cautious about using web sites as references. Wikipedia is NOT accepted!!! Use "Google Scholar" ([scholar.google.com](http://scholar.google.com)) to search for appropriate articles.
- If no references were used, simply state that "no references were consulted."
- Download and use Zotero (<https://www.zotero.org/>) for managing and exporting your citations into your document! In this manner your citations will ALWAYS be correctly formatted!

Discussion /  
Conclusion

If you are writing a paper, you MUST have a conclusion interpreting the results of the assignment. This might be different for specific project assignments!

OBJECTIVE: Interpretation of results and support for all of your conclusions, using ascertained experimental or observational evidence. The significance of findings should be clearly described.

DO explain a phenomenon by describing mechanisms and/or supporting evidence that may account for the observation.

DO explain why the outcome of the research may differ from your initial hypothesis.

DO try to offer alternative explanations if reasonable alternatives exist.

DO refer to any previous graphs, figures, and/or tables.

AVOID rehashing results. You should interpret the results.

AVOID simple statements that the data agreed with expectations without any further explanation.

AVOID the “inconclusive” statement. Rather imply that a decision can not be made with confidence based on detailed reasoning.

Equations &  
Computations

Equations should contain explanation of symbols used.

A reader should be able to follow where your values or numbers come from. Indicate accordingly.

WRITE DOWN UNITS!!!!

Show equations used before indicating any computation

Acceptable Example:  $F = m \times a = 0.034 \text{ kg} \times 9.8 \text{ m/s}^2 = 0.33 \text{ kgm/s}^2$

where  $m$  is mass of the object in kg as determined with a triple beam balance and  $a$  is the gravitational acceleration.  $F$  indicates force expressed in  $\text{kgm/s}^2$  or  $N$  (Newtons).

Unacceptable example: The answer is 0.33. This is obtained by multiplying gravity by 0.034.

Figures

Each figure must be sufficiently complete that it could stand on its own, separate from text.

DO number and caption figures consecutively and refer to them accordingly within your text. Captions go BELOW the figure.

DO provide a short description of your figure within the caption.

DO place your figures appropriately, closest to their mention in the text.

DO use appropriate citations for figures that are NOT your own. If you use a figure that has been modified by you, the phrase “modified after...” is most appropriate. Photos should show the name of the photographer.

DO make sure figures are legible and reproduce well. Print can be smaller than text, with an 8pt size minimum.

AVOID cluttering of figures with too much detail. Simplify if necessary.

AVOID moire patterns in photos, a nuisance in copied pictures.

GRAPHS

**Understand graphs: Bar graphs and/or line graphs are used when plotting nominal vs. ordinal data.**

**Scatter plot graphs are used when plotting nominal vs. nominal data.**

DO make sure that the graph axis are appropriately labeled and scaled. Axis should have titles as well as scalar units.

DO use electronic means to generated graphs. Hand drawn graphs are no longer acceptable.

Footnotes

NONE! If it is NOT important enough to go into the main body of your text, it is NOT important enough to be included in your paper.

Format	<p>Use Layout Checklist!!!</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Use a 12 or 11 point standard font (Times, Arial, Helvetica)</li> <li><input type="checkbox"/> Use letter size paper with 1 inch margins, single sided</li> <li><input type="checkbox"/> Place header on each page (except title page) showing your last name, assignment title, and consecutive PAGE NUMBERS</li> <li><input type="checkbox"/> Start each new section on a new page</li> </ul> <p>AVOID first person expressions such as “I”, “we”, “our”. This is a scientific paper. Use third person.          AVOID placing a heading at the bottom of a page with the following text on the next page          AVOID dividing tables or figures - confine each figure/table to a single page          AVOID informal wording, don't address the reader directly, and don't use jargon, slang terms, or superlatives          AVOID use of superfluous pictures - include only those figures necessary to presenting results AND discussed in your text!</p> <p>DO use normal prose, active voice and third party language          DO use paragraphs to separate each important point          DO present your points in logical order. A MUST when explaining computations / mathematical operations.          DO use present tense to report well accepted facts - for example, 'Pyrite is a sulfide mineral'          DO use past tense to describe specific results - for example, 'When acid was applied, the specimen effervesced'</p>
Introduction	<p>Maximal two pages</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Describe significance of the assignment in a broad context.</li> <li><input type="checkbox"/> Provide a rationale stating specific hypothesis(es) or objective(s), as well as your selection criteria. State the hypothesis/objective precisely - do not oversimplify.</li> <li><input type="checkbox"/> Very, <u>very</u> briefly describe the experimental design and how it accomplished the stated objectives.</li> </ul>
Plagiarism	<p>I do not believe that most students intentionally plagiarize. If they do it becomes rapidly obvious to me. Most plagiarism results most likely from ignorance.          However, MSUD policy now requires that EVERY case of plagiarism to be reported to the judicial affairs office and a student's file will be tagged. Therefore, <b>MAKE SURE YOU UNDERSTAND PLAGIARISM AND CITATION REQUIREMENTS. You have been warned!</b></p>
Subscript & Superscript	<p>Use appropriate subscript and superscript, especially when it comes to chemical formulas and mathematical units..</p> <p>Acceptable examples: <math>2.9 \text{ g/cm}^3</math>, <math>\text{H}_2\text{O}</math>, <math>\text{PO}_{43-}</math>, <math>a_g = 9.8 \text{ m/s}^2</math>          Unacceptable examples: <math>2.9 \text{ g/cm}^3</math>, <math>\text{H}_2\text{O}</math>, <math>\text{PO}_4 \text{ } 3-</math>, <math>a_g = 9.8 \text{ m/s}^2</math></p>
Tables	<p>Each table must be sufficiently complete that it could stand on its own, separate from text.</p> <p><b>Only HORIZONTAL lines are allowed in tables. Do NOT use any VERTICAL lines.</b></p> <p>DO consecutively number and caption tables and refer to them accordingly within your text. Captions go ABOVE the table.          DO provide a short description of your table within the caption.          DO place your tables appropriately, closest to their mention in the text.          DO make sure tables are legible and reproduce well. Print can be smaller than text, with an 8pt size minimum.          DO appropriately label columns. Do NOT forget units for nominal values.</p> <p>AVOID splitting tables across pages.</p>
Title Page	<p>Your title should summarize the purpose of the paper. “Lab 1” is NOT an appropriate title.          DO show your name, group partners names (if appropriate), date, and course ID on your title page.</p>

**ADDITIONAL GUIDELINES for the best possible grade**

Use the following web references for detailed explanation on HOW TO write scholarly research papers:

<http://www.ruf.rice.edu/~bioslabs/tools/report/reporterror.html>

<http://www.ncbi.nlm.nih.gov/books/NBK993/>

<http://www.gly.uga.edu/railsback/writing2.html>