

## **Hazards Paper Guidelines**

Each of you will choose a specific natural hazard and write a research paper on this topic.

The paper should include the following six major sections that should be labeled with bold headers. You do not need a page break between each section.

### **1) Introduction**

The introduction is proportional to the length of the paper. A one paragraph paper could have a one line introduction. A short paper would have a one paragraph intro, and a long paper or thesis could have a whole chapter or section for the introduction. Review the basic background of the topic, get the reader interested in what you are going to say, and then tell the reader what the scope of the paper will be.

**2) A thorough description of the hazard.** Although you are encouraged to use the textbook to give you an understanding of the basics, you will need to use the library and other resources to provide additional background. This description will cover the basic geology but do not merely repeat what was given in lecture. You will need to go more in depth than the level discussed in the textbook.

**3) A thorough description of one or several examples of disasters** associated with this hazard. A good plan would be to find a significant historical event and a recent event and describe the geologic setting and results of the disaster.

**4) A thorough description of U.S. public policy relating to this hazard.** What do the federal, state, and local governments have in place for mitigation? What more could be done to prevent future disasters? Comparison with other countries will be useful but not required.

**5) Your judgment about whether this hazard is likely to be a major disaster again** in the future, and whether we have learned from previous experience.

**6) Conclusion.** You need to wrap up your paper by reviewing each section and saying something final at the end. Do not merely stop writing when you get to the page limit.

### **Figures:**

You will need to provide figures that illustrate various aspects of your report. You could use a figure to explain the cause of the hazard, location figure of the disaster, photos of the damage, etc. Guidelines (1) Number them consecutively; (2) Each one needs a figure caption that YOU write; (3) Each one needs to be referenced in the text at the place that you want someone to see the figure. For example, "the sinkhole in Artesia (Figure 1) occurred overnight in August" and then figure 1 would be a photo or a map or whatever; (4) Put all figures at the end of the paper after the references, do not interleave them with the text.

**References:** Use APA Style, or GSA Bulletin Style. Here are some references:

<http://owl.english.purdue.edu/owl/resource/560/01/>

Online references require careful documentation:

<http://www.bedfordstmartins.com/online/cite6.html#1>

- Reference your sources at the end of the sentence. Example: “The landslide was caused by loose clays (San Diego Times, 2007). Examples of clays are montmorillonite, vermiculite, and illite (Grotzinger et al., 2007).” You don’t need to reference EVERY sentence, just the ones that have critical information. Sometimes you can use the source in the sentence, such as “The American Society of Civil Engineers (2004) estimates that 25% of all homes have damage from landslides.”
- Provide a reference list at the end of the paper. This can be at the bottom of your last page if there is space.

### **Research**

[www.usgs.gov](http://www.usgs.gov) has many useful pages

Do not cite Wikipedia articles. You can use Wikipedia to find other sources, but do not use it as a main source. You need to find primary sources such as journals.

Branson library: they have a good geology section

[http://www.sciencedaily.com/news/earth\\_climate/](http://www.sciencedaily.com/news/earth_climate/)

Many interesting articles on current events in geology.

### **Grading**

**10% Following basic format guidelines**

**10% Clarity and usefulness of photos/illustrations**

**30% Writing quality. Includes typos, paragraph construction, logical flow, and vocabulary**

**50% Written content and quality of research.**

### **Format:**

1) Typed: 12 point font

2) Times or Times Roman

3) 1 inch margins

4) Your first line should be within 2” of the top of the first page.

5) Use double spacing (format-paragraph-line spacing on MS Word).

6) Length: 5-8 pages double spaced.

7) NO covers or title page

8) Put title and your name at the top of the first page

9) Figures numbered consecutively and placed at the end of the paper.

**Spelling:**

Typing allows you to use a spell checker, but it doesn't catch when you use the wrong word. Frequently I read papers that use words that are spelled correctly, but they are the wrong words! Spell checking is not the same as proof-reading.

The plural of scientist is **scientists**, and the plural of geologist is **geologists**

**Sentence construction:**

- No run on sentences such as those that are long and have many topics in them usually without punctuation and wandering from topic to topic these you should avoid always
- Make sure your sentences verbs!
- Avoid (parenthetical statements)

**Suggestions for Paragraph Construction**

Each paragraph in your paper should have a topic sentence, a body of information or collection of sentences that relate to the topic sentence, and a concluding sentence that forms a bridge to the next paragraph. Think of your paragraphs as building blocks of the narrative. They start general, become specific and then literally spring to the next paragraph: 1. Topic sentence. 2. Supporting sentences. 3. Transition sentence.

**1. Topic Sentence**

This is a general statement of what will follow in the paragraph, the most sweeping statement in the paragraph. Example: "Two major stratigraphic sequences are present within the North Horn Formation in the study area."

**2. Support Sentences.**

The body of the paragraph, which consists of at least two more sentences (each paragraph should have a minimum of three sentences), comprises specific support material that relates to the topic sentence. Example:

"The sequences are bounded by unconformities near the basin margins; however, these sequences become concordant basinward and may merge into 'conformable' stratigraphic successions. Although numerous unconformities are present within North Horn sections near the margins of the basin, the major sequences are further characterized on the eastern side of the basin by abrupt reversals in the paleo-dispersal directions of clastic material entering the basin."

**3. Transition Sentence.**

Usually, one tries to conclude the paragraph with a transition sentence that connects it to the next paragraph. This is often done by using a key word in both the transition sentence and the following topic sentence. Example:

"...the major **sequences** are further characterized on the eastern side of the basin by abrupt reversals in the paleo-dispersal directions of clastic material entering the basin.

The lower **sequence** consists primarily of conglomerate, sandstone and siltstone of fluvial origin."

#### 4. Resulting Paragraph.

"Two major stratigraphic sequences are present within the North Horn Formation in the study area. The sequences are bounded by unconformities near the basin margins; however, these sequences become concordant basinward and may merge into 'conformable' stratigraphic successions. Although numerous unconformities are present within North Horn sections near the margins of the basin, the major sequences are further characterized on the eastern side of the basin by abrupt reversals in the paleo-dispersal directions of clastic material entering the basin. The lower sequence consists primarily of conglomerate, sandstone and siltstone of fluvial origin.

#### **Summary:**

Writing is the most important skill you can learn in college. If you need help, there are many on-campus resources. Have a friend read your paper. Read it to yourself out loud to hear if it sounds right. Good writing takes time and effort and many drafts.

**Plagiarism in writing** is using another person's work without acknowledgment, make it appear to be one's own. Any ideas, words, pictures, or other intellectual content taken from another course must be acknowledged in a citation that gives credit to the source. This is irrespective of the origin of the material, including the Internet, other students' work, unpublished materials or oral sources. Intentional and unintentional instances of plagiarism are considered instances of academic misconduct. It is the responsibility of the student submitting the work in question to know, understand, and comply with this policy.

**Even with a citation, failure to put quotation marks around direct quotations also constitutes plagiarism, because it implies that the writing is your own. Material should either be paraphrased or clearly designated as a quotation. Note that replacing words with synonyms, changing verb tense or other minor alterations do not qualify as paraphrasing. \*\*\*This is the most common form of plagiarism that I see.**

<<http://www.nmsu.edu/%7Evpsa/SCOC/misconduct.html>>.