Instructions for the Weekly Journal Assignment

This assignment addresses the ‘importance of paleontology’ goal.

Each week, students summarize either a news article or newly published paper from that week. In addition to developing students’ skills at synthesizing (and critiquing) information, it gives students the opportunity to reflect on their learning, make connections between what we have learned in class and what is going on in the real world, and enables students to learn about the newest discoveries and cutting-edge research that otherwise might get overlooked during the formality of delivering the course.
“Paleontological Journal” assignment

Keep a journal of paleontological events/discoveries/happenings for the semester.

Requirements – Weekly Entry
• Minimum of 1 entry per week from Sept 4 through Dec 11. Entries should be events/reports from that week!
  o E.g. for due date of Sept 4, events should be from the week of Aug 28 – Sept 4.
• Your weekly entries will be emailed to me every Friday starting Sept. 4 (no entry due the week of Thanksgiving)
• Full citation information for each entry must be provided so that I or your peers can locate the information
• Each entry will consist of a brief (short paragraph) summary of the news article, in your own words; and a separate statement describing your perception of the significance (to paleontology, to science, to humans, to you) of the event/discovery.
• Both entries should be in a single document.

Other information
• I do not need you to copy the source article into the journal entry.
• Any interesting documentaries on television: make sure you know the year the program was made. Program needs to have had its first airing in the week you are writing about it. Include it as an additional journal entry (i.e., not the required one).
• Please check spelling/grammar prior to submission.

Reflection piece – Due Dec 18
I will return your cumulative journal entries at the end of the final week of classes. Using these, write a ½ to 1 page reflection piece on how the journal entry activity throughout the semester has enhanced your awareness of paleontology and how paleontology impacts humans, and any role the assignment has played in your learning about paleontology.

You may also want to consider questions such as:
  - did the journal entries make the class more meaningful?
  - Do you think the journal entries made you more interested in the course / geology?
  - How has your awareness of the world around you changed as a result of keeping this journal?
  - Did your position on any issues change, or become strengthened, as a result of researching topics for your journal entries?

Some examples of where to locate information
• Online news services, newspapers. Blogs are not appropriate.
• US Geological Survey (particularly for links to recent earthquake info and volcano statuses globally; you can sign up for an email notification of earthquakes)
• Peer-reviewed general-interest scientific journals (e.g. Nature and Science, both of which are accessible online – you will not have full text access but you will have access to the summaries of the research. These journals also provide ‘news reports’ of recent research.
• Non-peer-reviewed monthly general-interest magazines (e.g. Scientific American, New Scientist). Use articles from these only the week the issues come out (in print or online).
• Peer-reviewed paleontological journals: peruse the latest issue of the major journals (Palaeontology, Palaeos, Journal of Paleontology, Palaeologica electronica, Journal of Vertebrate Paleontology etc.) the week they are posted; you can access the abstract (article summary) without having to subscribe.

Citing your sources
For each event, provide a full bibliographic reference in APA format. Whether it is a news service or a peer-reviewed journal, you will need the following information: author, date of publication/event, title of article/news report, source information (e.g. journal name and volume and page numbers, and url).
Ensure your entries are paraphrased – do not copy directly from the source.

Grading:
This assignment is worth 10% of the course grade.

The maximum number of points for this assignment is 160, as follows:
- 10 points per week (5 points per ‘entry’)
- 20 points for the reflection piece

Each entry (worth 5 points) is graded as follows, each character listed is worth 1 point:
- **Scope**: is it paleontological?
- **Amount of information/brevity**
- **Human dimension**: (why is it important/interesting?)
- **Timeframe**: (is it a recent event – within the last week?)
- **Bibliography**: present, and in APA format

Deductions of up to 2.5 points per entry for spelling/grammar errors
Late penalty (10%) will be assessed for late submissions.
Instructions and Rubric for Literature Review Paper and Oral Presentation

The paper/presentation assignment addresses the ‘communication’ course goal. Students are provided with the rubrics for the paper and presentation at the start of semester.

This course is a ‘Writing Intensive’ course, meaning that writing is an important component of the course. This paper meets the ‘page requirement’ of WI courses, and students have a series of stages to complete including identifying their topic and (potential) sources, submitting a draft and completing a revision.

When students submit the draft (as with the field lab report and the presentation) they are required to also submit their ‘self-grade’; when I return the draft to them my grade is next to their grade. This is a useful means of communicating expectations! In addition, the paper assignment is also graded (using the same rubric) by another student in the class. However, only the instructor’s grade counts towards their actual grade.

Over the semester, approximately one class period (90 minutes) is spent on developing the paper, including how to critically evaluate whether a source is authoritative or peer-reviewed, how to go about the writing process, and how to develop an effective powerpoint presentation.

The powerpoint presentation is useful for two purposes: within the class, it enables students to learn (from each other) about several topics in detail that would not otherwise have been covered; and within the Environmental Science curriculum, it is part of a longitudinal effort to build students’ oral communication skills.
Review Paper

Write a literature review paper on a paleontological topic of your choice.

- Topics could include controversies about fossils (e.g. was T. rex a scavenger or a hunter?), the paleoecological or paleoenvironmental analysis of a particular geologic formation, biostratigraphic analysis of a particular time interval (could include mass extinctions); or biogeographic distributions of a group of organisms... the possibilities are endless! (If you are stuck for a topic, peruse the table of contents of recent issues of paleontology journals; there are several journals on JSTOR, with links to the journal’s homepage for more recent issues.)
- You must have a thesis statement (refer to Rules for Writers for information). This is not a review of a topic.

This is a Writing Intensive course; there will be several stages to the paper-writing process. A revision is required. Your final paper grade will incorporate both the draft and revised paper’s grades, as well as how well you incorporated comments into your revision. You will prepare a 7-10 minute presentation which will be given at the end of semester.

Deadlines:
- Sept. 22, 11 am (email): topic submission; ensure you have done a preliminary search for sources and are sure that you will be able to find appropriate sources. Include the list of possible sources.
- Oct. 27, 11 pm (email): draft due. You should aim to have this draft be as close to perfect as you can make it.
- Dec 1, 11 pm (email): revision due.

Length: 10-15 pages (12 point Times New Roman, 1” margins, double-spaced), excluding Literature Cited & top info (assignment title, your name, etc.). Please include a running header (e.g. ‘Emma’s PaleoPaper’) and page numbers.

Grade: A rubric for the paper can be found on pages 3 & 4 of this document (the presentation rubric will be provided separately). This shows the criteria on which your paper will be graded, as well as the standards for each criterion. Before submitting your draft, copy the rubric to the end of your paper and grade yourself. You will also submit the draft (without your self-grade) to another student, who will also grade your paper (using the rubric) and provide critical feedback. Your paper is worth 20% of the course grade; the final grade for the paper assignment will factor in the grade from the draft, the revision, and the revision process (i.e., how well you addressed the draft’s feedback from both myself and your student colleague):
  Draft: 15%
  Revision: 65%
  How well the comments were incorporated: 10%
  Presentation: 10%

About Sources

You need to use a minimum of 5 peer-reviewed sources; with one (or more) written in 2007 or later.
- Text books (including our course book), lecture material, and any other in-class information, are off-limits.
- Don’t settle with the first five sources you find; keep searching!
- Use library databases for articles in scientific journals (which also contain reviews, journalists reports, opinion pieces that may be useful background info but are not peer-reviewed). Note that many databases may not have recent articles, so you will need to expand your search to find more recent (2006+) material.
- There are technical books and edited volumes in the library. Edited volumes include chapters by different experts (each of which is a separate peer-reviewed article). For technical books, check with the instructor as to whether a particular book may be used.
- If two cited sources contradict each other, you will need to discuss the discrepancy.
- If two (or more) sources say the same thing: you only need to say it once, but cite all of the sources say it. The more sources you have that support an argument will lend weight to that argument.
- Encyclopedias (online or print; including Wikipedia) are off-limits (unreliable), as are news reports (online or print) and videos/documentaries. (Recent news reports may only be used to provide ‘tidbits’ of information to supplement your information.)
- Websites etc.:
<table>
<thead>
<tr>
<th></th>
<th>Unacceptable (0 to 2)</th>
<th>Acceptable (3)</th>
<th>Good (4)</th>
<th>Excellent (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content, compreh-</strong></td>
<td><strong>Did not seem to understand the topic very well. Objective was unclear. Level of</strong></td>
<td><strong>Showed an average understanding of parts of the topic. The objective was</strong></td>
<td><strong>Showed a good understanding of the topic. Objective was</strong></td>
<td><strong>Showed a full understanding of the topic. Objective was clearly</strong></td>
</tr>
<tr>
<td><strong>hension</strong></td>
<td><strong>content not well matched to the level of the class</strong></td>
<td><strong>somewhat communicated. Level of content somewhat well matched to the level</strong></td>
<td><strong>fairly communicated. Level of content</strong></td>
<td><strong>communicated. Level of content well matched to the level of the class</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>of the class</strong></td>
<td><strong>quite well matched to the level of the class</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Preparedness</strong></td>
<td><strong>Did not seem prepared, uncomfortable with topic.</strong></td>
<td><strong>Somewhat prepared, clear that rehearsal (and comfort) was lacking</strong></td>
<td><strong>Reasonably prepared, could have been a little better rehearsed.</strong></td>
<td><strong>Well prepared, obviously rehearsed. High level of comfort.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public speaking,</strong></td>
<td><strong>Often mumbled or could not be understood. Mispronounced many words. Read from</strong></td>
<td><strong>Spoke clearly &amp; distinctly some of the time. Mispronounced some words. Read</strong></td>
<td><strong>Spoke clearly &amp; distinctly most of the time. Mispronounced a few</strong></td>
<td><strong>Spoke clearly &amp; distinctly all of the time. Did not mispronounce words.</strong></td>
</tr>
<tr>
<td><strong>eye contact,</strong></td>
<td><strong>cards/slides. Did not generate interest in topic; did not look at people. Could</strong></td>
<td><strong>from cards/slides. Did not generate much interest in topic. Established eye</strong></td>
<td><strong>words. Did not rely heavily on cards/slides. Generated a fair level</strong></td>
<td><strong>Very little reliance on cards/slides. Generated a high level of interest</strong></td>
</tr>
<tr>
<td><strong>volume</strong></td>
<td><strong>not be heard in back of room.</strong></td>
<td><strong>contact with few people. Not loud enough to be heard in back of room most of</strong></td>
<td><strong>of interest in topic. Established eye contact with most of room.</strong></td>
<td><strong>in topic. Established eye contact with everyone in room. Audible in back</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>the time.</strong></td>
<td><strong>Audible in back of room.</strong></td>
<td><strong>of room.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flow</strong></td>
<td><strong>Little to no flow; awkward transitions between slides/content</strong></td>
<td><strong>At times flowed well; transitions between slides/content worked well at times.</strong></td>
<td><strong>Generally flowed well; transitions between slides/content generally effective.</strong></td>
<td><strong>Flowed extremely well; transitions between slides/content highly effective.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>References</strong></td>
<td><strong>There was little to no mention of references either orally or written in the slides.</strong></td>
<td><strong>Some references were acknowledged and some were at times integrated into the</strong></td>
<td><strong>References were generally acknowledged and well integrated into the</strong></td>
<td><strong>References were clearly acknowledged and superbly integrated into the</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>presentation well.</strong></td>
<td><strong>presentation.</strong></td>
<td><strong>presentation.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connection</strong></td>
<td><strong>It was not clear why this topic was important. I left feeling disappointed and</strong></td>
<td><strong>It was not clear why this topic was important. I left feeling the presentation</strong></td>
<td><strong>It was clear why this topic was important. I left feeling I had</strong></td>
<td><strong>It was clear why this topic was important. I left feeling I had</strong></td>
</tr>
<tr>
<td></td>
<td><strong>felt I had not learned anything.</strong></td>
<td><strong>had some good points, but it could have been better focused.</strong></td>
<td><strong>learned a few things</strong></td>
<td><strong>learned new things</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td><strong>Slides were poorly designed, drawing attention away from content. Could not read</strong></td>
<td><strong>Slides were not well designed, sometimes drawing attention away from content.</strong></td>
<td><strong>Slides were well designed, usually legible from back of room, and usually</strong></td>
<td><strong>Slides were well designed, legible from back of room, and did not</strong></td>
</tr>
<tr>
<td></td>
<td><strong>slides from back of room. No consistent theme.</strong></td>
<td><strong>could not easily read slides from back of room.</strong></td>
<td><strong>did not distract from content.</strong></td>
<td><strong>distract from content.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Non-peer-reviewed sources such as websites must be evaluated.
- They should typically be affiliated with an educational institution (usually .edu, but ensure they are not written by students as part of a class) or a government (e.g. .gov, other countries, state, county).
- US Geological Survey website is a good place to start.
- Do not use sites that are clearly aimed at children.
- For evaluating websites – see the library’s tutorial
- Multiple pages of a single website, by the same author(s), count as a single source (but cite the pages all separately.)

About Writing
- Do not directly quote anything; always use your own words (and remember to use a citation for every fact that is not common knowledge).
- Because you are reviewing research that has already been conducted: use the past tense when referring to these studies.

About Citations and Literature Cited
Whatever information you use, you must cite: i.e., for any idea other than what you knew already, provide an in-text (e.g., parenthetical) citation, in APA format. Typically, provide a citation for every idea/fact - you may have citations every sentence, even more than one citation per sentence. You also need a separate Literature Cited section (which provides the full information about the source; the citation is the short-hand version). One citation per paragraph – even if the entire paragraph’s information is from a single source – is generally inadequate (a citation belongs to the idea it is ‘attached’ to and a paragraph generally contains multiple pieces of information…)
- If you do not use citations and/or do not have a Literature Cited section, you will get a zero grade (for plagiarism).
- If you are citing an article that you did not read, but is relied on heavily in an article you did read, cite it as (e.g.) ‘Smith 1980, cited in Jones 1982’. Include the Jones 1982 article in your ‘Literature Cited’ section, and have a Supplemental Works Cited for articles (such as Smith 1980) that you cited but did not read yourself. The works listed in your Supplemental Works Cited do not count toward your required number of sources.

About the Paper-Writing Process
1. What is the purpose of the paper? Keep it in mind throughout the paper-writing process.
2. Explore the topic: collect data (in this case, e.g., through the published literature). Make notes! Compare and contrast ideas from different sources; critically evaluate and synthesize the key points made by your sources. You may even make very rough drafts of sections of the paper. You may find that a ‘problem’ is not a problem after all. You may find more interesting issues that you want to explore instead.
3. Incubate your ideas. Let them simmer! Perhaps you will realize you need additional information; or perhaps the ‘purpose’ of the paper changes. Your ideas will develop over time.
4. Write a rough draft. It is your first attempt - it is not intended to be turned in. You can have low expectations – just get something down on paper. (You may want to start with an outline.)
5. Revise or reformulate the rough draft. You may need to start the paper all over again. Perhaps your thesis requires modification. Make a new outline if necessary. Ensure you have a thesis, an introduction to the paper, and conclusions that you have drawn from your research.
   This revised draft needs to consider your audience: make the essay work for your readers, clarify the purpose and the rhetoric. What may seem obvious to you, the writer, may not be come across to your reader. Write for your readers.
6. Edit. Go over the draft with a fine tooth comb for coherence, unity, paragraphing, sentence structure, etc. Then turn in your completed paper. (Note that some assignments will require a revision of this version of the paper).

About Revisions
- Your revisions need to address the comments made by both the professor and the student reader. If you have any questions about comments, please see the professor.
- Part of your final grade for the assignment is how well you addressed the feedback.
- Typically, when grading the draft, the professor will not point out every grammatical/spelling error, especially if there is a pattern emerging (i.e., the same type of error appearing repeatedly). It will be up to you to take note of the comments and ensure that the entire paper is reviewed to ensure such errors are addressed throughout the paper, even though not all of them will not have been pointed out.
The following chart provides guidelines for grading.

Top row: provides grade range for each standard. 3rd column: defines the standards and the number of points each standard is worth.

Grade: enter the number of points (0 to 5) for the standard that applies (see top row).

<table>
<thead>
<tr>
<th>Prof’s grade</th>
<th>Your self-grade</th>
<th>Inadequate (0 to 2)</th>
<th>Acceptable (3)</th>
<th>Good (4)</th>
<th>Excellent (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCIENCE (70% OF GRADE)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose, thesis &amp; significance (weight 1)</td>
<td>The central purposes are generally unclear; no thesis statement. Significance is not demonstrated.</td>
<td>The central purposes are not consistently clear throughout the paper.</td>
<td>The central purposes are clear, but there are some digressions from it.</td>
<td>The central purposes are readily apparent to the reader; the thesis statement is clear. Significance of subject is clear.</td>
<td></td>
</tr>
<tr>
<td>Organization (weight 2)</td>
<td>No distinct introduction, body, or conclusions. Body is a succession of summaries of each source.</td>
<td>Introduction and conclusions present but not well-developed. Body not organized by sub-topic.</td>
<td>Introduction and conclusions present and moderately well-developed. Body is distinct and organized thematically.</td>
<td>Distinct introduction, outlining the purpose, and conclusions, summarizing the paper. Subheadings used to define parts of the paper’s body.</td>
<td></td>
</tr>
<tr>
<td>Synthesis of ideas (body of paper) (weight 3)</td>
<td>The writing is not logically organized. Frequently, ideas fail to make sense together. The reader cannot identify a line of reasoning and loses interest.</td>
<td>In general, the writing is arranged logically, although occasionally ideas fail to make sense together. The reader is fairly clear about what writer intends.</td>
<td>The ideas are arranged logically to support the central purposes. They are usually clearly linked to each other. For the most part, the reader can follow the line of reasoning.</td>
<td>The ideas are arranged logically to support the central purposes. The ideas flow smoothly from one to another and are clearly linked to each other. The reader can follow the line of reasoning.</td>
<td></td>
</tr>
<tr>
<td>Content (weight 6)</td>
<td>Central purposes are not addressed. Analysis is vague or not evident. Reader is confused or may be misinformed. Sources used poorly.</td>
<td>Information supports the central purposes at times. Analysis is basic or general. Reader gains few insights. Sources used reasonably well.</td>
<td>Information provides reasonable support for the central purposes and displays evidence of a basic analysis of the topic. Reader gains some insights. Sources used well.</td>
<td>Balanced presentation of relevant and legitimate information that clearly supports the central purposes and shows a thoughtful, in-depth analysis. Reader gains important insights. Excellent incorporation of sources throughout paper.</td>
<td></td>
</tr>
<tr>
<td>Choice of sources (weight 2)</td>
<td>There are virtually no peer-reviewed/authoritative sources (the reader seriously doubts the value of the material). Or insufficient number of sources used; over-reliance on one or two sources.</td>
<td>Most of the references are non-authoritative sources and have uncertain reliability. Or insufficient number of sources used.</td>
<td>Although most of the references are professionally legitimate, a few are questionable (e.g., trade books, some internet sources, popular magazines, news articles etc.). The bare minimum number of authoritative sources were used.</td>
<td>References are primarily professional journals or other authoritative sources (e.g., government documents, agency manuals etc.). The reader is confident that the information and ideas can be trusted. A wide variety of sources are used, providing reinforcement for ideas presented.</td>
<td></td>
</tr>
</tbody>
</table>

<p>| <strong>WRITING (30% OF GRADE)</strong> | | | | | |
| Grammar/ spelling (weight 1) | There are so many errors that meaning is obscured. The reader is confused and stops reading. | The writing has many errors, and the reader is distracted by them. | There are occasional errors, but they don't represent a major distraction or obscure meaning. | The writing is free or almost free of errors. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Linguistics - tone (weight 0.5)</th>
<th>Linguistics - writing structure (weight 0.5)</th>
<th>Linguistics - word choice (weight 0.5)</th>
<th>Literature Cited (weight 1)</th>
<th>In-text citations (weight 2)</th>
<th>APA format (weight 0.5)</th>
<th><strong>Total (out of 30)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The tone is unprofessional. Tone is not appropriate for an academic paper. Writing does not engage the reader.</td>
<td>Errors in sentence &amp; paragraph structure are frequent enough to be a major distraction to the reader. Some sentences/paragraphs are awkwardly constructed so that the reader is occasionally distracted.</td>
<td>Many words are used inappropriately, confusing the reader. Word choice is merely adequate, and the range of words is limited. Some words are used inappropriately.</td>
<td>Missing some or all sources. All sources are listed; frequent errors/incomplete information.</td>
<td>Missing or scarce (e.g. &lt; one per paragraph). Although attributions are occasionally given, many statements seem unsubstantiated. The reader is confused about the source of information and ideas.</td>
<td>Not recognizable as APA format</td>
<td>There are frequent errors in APA format. APA format is used with minor errors.</td>
<td>No citations and/or no Literature Cited: zero for assignment (for plagiarism). For each 'missing' peer-reviewed source: 10 point deduction (e.g., I ask for 5 and if you give me only one: 40 point deduction) Incorrect length (+/- ¼ page of specified length): 10 point deduction per page (or part thereof).</td>
</tr>
<tr>
<td>The tone is not consistently professional or appropriate for an academic paper. For the most part, it is appropriate for an academic paper.</td>
<td>Sentences are well-phrased and there is some variety in length and structure. The flow from sentence (paragraph) to sentence (paragraph) is generally smooth.</td>
<td>Word choice is generally good. The writer often goes beyond the generic word to find one more precise and effective.</td>
<td>All sources are listed; some errors or incomplete info.</td>
<td>Attribution is, for the most part, clear and fairly represented.</td>
<td>Attribution is clear and fairly represented.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instructions and Rubric for Field Lab writeup – ‘Hamburg Stromatolites’

This field lab is the first field lab of the semester (when it is still likely to be warm out), and is also the first ‘fossil’ lab *per se* (up to this point in the semester labs have focused on taphonomy and applications including biostratigraphy and cladistics).

The outcrop is a roche moutonnee that has been cut through by a road (in a small semi-private development), giving a fabulous stratigraphic cross-section. The lab requires students to make detailed observations on an outcrop, both about the fossils (stromatolites) and the lithology. As such it addresses the two ‘content goals’ of the course: assessing mode of life of an organism and determining the paleoenvironmental context.

The second field lab (see Activity 1) is identical in format, but utilizes Paleozoic outcrops; the students get their teeth into a wide range of invertebrates.
Lab 4: Gingerbread Castle Stromatolites - Rubric

Deadline: Monday October 6th, 11 am.

What to turn in (by email)

- Report text (emailed)
- Sketch(es) of outcrop. Make sure you have a scale, and label all features. Photographs are not accepted as substitutes for a field sketch, but may be included as supplemental material; ensure they have captions. You can provide the actual field sketch(es) - no need to redraft it (them).

Sketches should be scanned and sent as email attachments (or embedded in your field report).

Maximum size of an individual email message is 5 MB.

Format of the report:

- Logistical details
  - Date, time of trip, weather.
- Field observations & interpretations.
  - Stromatolites:
    - Describe the visible features of the stromatolites (in 3-D – i.e. top and side views).
    - Include your sketch(es) of the stromatolites and associated features.
    - Include your observations of the features associated with the stromatolites (e.g., mudcracks, breccia), and the interpretations of these features (and justification: e.g., if you state that the mudcracks indicate that the surface was permanently underwater, state why you think that).
  - Additional primary features (including, but not limited to: birds-eyes, breccias, edge-wise conglomerates, ooids, tidal channels, rip-up clasts, etc.). Detailed observations plus interpretations.
  - Secondary features: orientation of the strata; glacial features: observations and interpretations.
- This report is essentially a transcription of your field notes (but re-ordered into a logical sequence). It is not a ‘paper’.
- If you use any external sources (e.g. the field paper, or authoritative sources on stromatolites) – information must be cited, and you must have a works cited. (See termpaper guidelines for details.)

The following chart provides guidelines for grading.
Top row: provides grade range for each standard. 3rd column: defines the standards and the number of points each standard is worth.
Grade: multiply the ‘weight’ points (3rd column) by the number of points for the standard that applies (top row).

Attach a copy of this chart to your report, and in the 2nd column, put in the grade you think your report will get.
<table>
<thead>
<tr>
<th>Prof's grade</th>
<th>Your self-grade</th>
<th>Unacceptable (0-2)</th>
<th>Acceptable (3)</th>
<th>Good (4)</th>
<th>Excellent (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCIENCE (80 points)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistical information (weight 1)</td>
<td>No information provided.</td>
<td>Much information missing.</td>
<td>Some information missing.</td>
<td>Complete information.</td>
<td></td>
</tr>
<tr>
<td>Organization (weight 2)</td>
<td>Report is poorly organized. Reader can not follow either lines of reasoning for stops, or can not determine what rocks are being written about.</td>
<td>Reader can ascertain what stops/rocks are being written about. Stops are organized logically.</td>
<td>Reader can ascertain what stops/rocks are being written about; each stop is organized logically. Report overall is organized logically.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromatolites (weight 5)</td>
<td>Omitted, or very brief.</td>
<td>Moderately complete descriptions/interpretations provided; or some features omitted.</td>
<td>Stromatolites &amp; associated features described, environmental interpretations provided but no rationale for interpretations is given.</td>
<td>Detailed description of stromatolites and associated features; environmental interpretations given, with rationale provided.</td>
<td></td>
</tr>
<tr>
<td>Stroms - sketch (weight 1)</td>
<td>Sketch not included.</td>
<td>Sketch provided, no scale, no labels or grossly inaccurate.</td>
<td>Sketch lacks either scale or label or is somewhat inaccurate.</td>
<td>Sketch includes scale and labels and accurately portrays the outcrop.</td>
<td></td>
</tr>
<tr>
<td>Other primary features (weight 4)</td>
<td>Omitted, or very brief.</td>
<td>Moderately complete descriptions/interpretations provided; or some features omitted.</td>
<td>Primary features described, environmental interpretations provided but no rationale for interpretations is given.</td>
<td>Detailed description of other primary features seen in the strata; environmental interpretations given, with rationale provided.</td>
<td></td>
</tr>
<tr>
<td>Secondary features (weight 2)</td>
<td>Omitted, or very brief.</td>
<td>Moderately complete descriptions/interpretations provided; or some features omitted.</td>
<td>Secondary features described, environmental interpretations provided but no rationale for interpretations is given.</td>
<td>Detailed description of secondary features of the outcrop; interpretations given, with rationale provided.</td>
<td></td>
</tr>
<tr>
<td>Significance of site (weight 1)</td>
<td>Significance not given, or factually incorrect.</td>
<td>Significance outlined.</td>
<td>Significance provided in moderate detail.</td>
<td>Significance explained in detail.</td>
<td></td>
</tr>
<tr>
<td><strong>SCIENCE TOTAL (out of 80)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WRITING (20 points)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grammar/ spelling (weight 2)</td>
<td>There are so many errors that meaning is obscured. The reader is confused and stops reading.</td>
<td>The writing has many errors, and the reader is distracted by them.</td>
<td>There are occasional errors, but they don't represent a major distraction or obscure meaning.</td>
<td>The writing is free or almost free of errors.</td>
<td></td>
</tr>
<tr>
<td>Linguistics - tone (weight 1)</td>
<td>The tone is unprofessional. Tone is not appropriate for an academic paper. Writing does not engage the reader.</td>
<td>The tone is not consistently professional or appropriate for an academic paper.</td>
<td>The tone is generally professional. For the most part, it is appropriate for an academic paper.</td>
<td>The tone is consistently professional and appropriate for an academic paper. Writing is exciting and reader is engaged in subject.</td>
<td></td>
</tr>
<tr>
<td>Linguistics - word choice (weight 1)</td>
<td>Many words are used inappropriately, confusing the reader.</td>
<td>Word choice is merely adequate, and the range of words is limited. Some words used inappropriately.</td>
<td>Word choice is generally good. The writer often goes beyond the generic word to find one more precise and effective.</td>
<td>Word choice is consistently precise and accurate.</td>
<td></td>
</tr>
<tr>
<td><strong>WRITING TOTAL (out of 20)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>REPORT TOTAL (out of 100)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>