

**GEOL 789W Recent Advances in Geology: Phanerozoic History, Macroevolution,  
and Earth System Sciences**  
(GEOL 489W Special Topics in Geology: Phanerozoic History, Macroevolution, and Earth System  
Sciences)

Spring Semester 2008

INSTRUCTIONS FOR PAPER & PRESENTATION

**PAPER and PAPER PRESENTATION:** Each student will be responsible for one review paper of a topic in Phanerozoic history, summarizing and synthesizing the current literature. Topics must be discussed with the instructor by 4/3. Papers are due on **5/8**. Additionally, each student will be asked to present their paper as a 10-15 minute talk on 5/13.

**TOPIC:** Any review topic concerning some aspect of paleobiology during the range of the Metazoa (Ediacaran-Quaternary).

**LENGTH:** Approximately 8-15 pp. manuscript, exclusive of Title Page, Abstract Page, Bibliography, Tables, Figure Captions, Figures, and/or Appendices (if any)

**FORMAT:** Follow format of the journal *Paleobiology* (see below) for page & font size, line spacing, section headings, abbreviations, bibliographic style, etc.

**Formatting your manuscript**

**General Notes**

- Double-space the entire manuscript in 12-point type, including text, abstract, Literature Cited, tables, figure captions, and appendices.
- Number all pages of the text beginning with the title page.
- Italicize text that should be italicized: do **not** underline such text; reserve underlines for text that should be underlined (e.g., some mathematical equations). Pay particular attention to: binomials probability (*p*) and other mathematical variables, statistical test names (*t*-test; *F*-test), etc.
- Do not break or hyphenate words at the right margin.
- Leave the right margin ragged (no right or full justification).
- Leave at least a one-inch margin on all sides of the pages. Use 8.5 by 11 inch (21.5 by 28 cm) paper.
- Collate the manuscript in the following order: title page, abstract, text, Literature Cited, appendix, figure legends, tables, and appendix tables.

**Title Page**

- The first page of the manuscript should include the title (capitalize only the first word and any proper names), and the right and left running heads.
- Authors' names are placed below the title in capital and lowercase letters.
- The running head is below the authors' names. Running heads are not to exceed a total of 40 characters and spaces, and all letters are capitalized. The right running head (RRH) is the running title and the left running head (LRH) is the name or names of the authors. Use "et al." for more than two authors.

RRH: ONSHORE-OFFSHORE FAUNAL CHANGE

LRH: JOHANN S. BACH

LRH: DANA A. JOHNSON AND MICHELLE R. JOHNSON

LRH: RONAELE M. NOVOTNY ET AL.

### Abstract Page

- An abstract must be provided, and should be no longer than 3%-5% of the length of the manuscript.
- The abstract should be on its own separate page(s).
- "Abstract" is italicized and followed by a period and a dash. All lines are flush left.
- The abstract is followed by the names and addresses of the authors, with the first line left-justified and any subsequent lines indented. Italicize all names and addresses. Do not use abbreviations. Include e-mail addresses if desired.

James P. McCalpin. Department of Geology, Utah State University, Logan, Utah 84322

### Text Headings

1. Primary headings are centered and in boldface. The first word and all other important words in the heading are capitalized. Articles, conjunctions, and prepositions are in lowercase.

#### Results of the Experiment

2. Use secondary headings only if three levels of headings are required. If only two levels of headings are required, primary and tertiary headings are used. Secondary headings are capitalized the same as primary headings and are flush with the left margin. The text begins on the next line.

Hierarchical Effects

Text begins here.

3. Tertiary headings are capitalized the same as primary headings, indented, italicized, and followed by a period and a dash. The text follows the dash.

*Hierarchical Effects.*—The possible significance of . . .

### In-Text Literature Citations

- A one-to-one correspondence must exist between works cited in the text and listed in the Literature Cited section. Books or manuscripts in press must be included; unpublished data and manuscripts in review or otherwise unpublished are not. **Avoid citing unpublished theses or dissertations.**
- The authors are responsible for the accuracy of all citations.
- Literature is cited in the text, in chronological order, by the last name of the author or authors and the date of publication. For works with three or more authors, the last name of the senior author is followed by "et al." Use semicolons to separate multiple citations by different authors; use commas to separate multiple citations by the same author. Specific pages, tables, or figures within a reference should follow a colon after the reference year. **A date should be provided for all personal communications.**

(Darwin 1859)

(McCalpin et al. 1987: Fig. 2)

(Darwin 1859; McCalpin et al. 1987, 1989: pp. 22-24)  
(Novotny and Borders 1988: p. 123)  
(Greenwell in press)

(J. Johnson personal communication 1989)  
(J. Jones and T. Freeman unpublished data)

- Where nested parentheses are necessary, use brackets inside parentheses and braces inside brackets ({}). Note that the order is the reverse for equations {[()]}.

(Jones [1968] indicated . . .)

### **In-Text References to Figures and Tables**

- Figure parts are capitalized (Fig. 3A).
- “Table” and “Appendix” have an initial capital and are not abbreviated. If there is only one Appendix, it is not numbered.
  - (Fig. 2)
  - (Novotny 1968: Fig. 4)
  - (Borders and Greenwell 1972: Table 1)
  - In Figure 15, we see . . .
  - (Table 2, Fig. 3)
  -
- If figures and tables are not embedded in the text, then they should be flagged in the margins at their first appearance in the text to indicate their placement. They should be so flagged in the final submission.

### **Mathematical Equations, Statistics, and Numerals**

- Use italics where necessary. Indicate any italicized parts that may not be obvious with a highlight and comment.
- For probability, use lowercase italic  $p$ . For example,  $p < 0.001$  or  $p = 5 \times 10^{-10}$ .
- Use metric units. If nonmetric units are required, provide the metric equivalents also.
- Spell out numbers one to ten unless used with units of measurement. Use Arabic numerals for numbers over 11 and for non-integers. Use 10<sup>-4</sup>, 10<sup>-5</sup>, etc. for numbers less than 0.001 (see 2!).
- “Equation” is spelled out and lowercase except when a capital would ordinarily be required. It is abbreviated when used in a parenthetical reference to an equation. Equation numbers are in parentheses, unless they appear in a parenthetical phrase.

Equation (6) shows the results . . .

(Raup 1978: p. 23, eq. 2)

We refer to equation (2) in the next section . . .

- Mathematical expressions and equations set out from the text should be written so that they can be set on one line, if possible.
- Numbered equations should be centered on the line. Equation numbers should be on the right margin of text, with the numbers enclosed in parentheses.
- Identify ambiguous characters; e.g., lower-case letter l versus numeral one, capital letter O versus numeral zero, lowercase Greek chi versus lowercase letter x versus the multiplication symbol.

- Use fractional exponents instead of root signs and the solidus (/) for fractions where possible.
- “ca.” is the preferred abbreviation for approximate dates. For other approximations, no abbreviations should be used (e.g., approximately 400¼ or about 30‰). In instances where approximations are made frequently, the wavy equal sign symbol should be used.

### Geologic Time

- Use the abbreviations Ga, Ma, and Ka to indicate dates (billions, millions, and thousands of years before the present, respectively). Use Gyr, Myr, and Kyr to indicate duration of time.
- The names of formal time units or time-stratigraphic units should be capitalized. Unless there are special circumstances, use Gradstein et al. (2005: A geological time scale 2004. Cambridge University Press) or the ICS stratotypes (<http://www.stratigraphy.org/gssp.htm>) as guides.
- Use “Early/Late” to refer to formal chronologic units (e.g., Late Ordovician);
- Use “early/late” to refer to informal ones (e.g., late Carboniferous);
- Use “Lower/Upper” to refer to stratigraphic units.
- Use a slash (/) to denote boundaries, and a hyphen (-) to denote time ranges.

(K/T boundary)

(Eocene-Oligocene mammals)

### Acknowledgments

- Spell out all agency and university names.
- Do not use honorifics such as Dr., Prof., Mrs., etc. Use initials for given names of individuals.

### Literature Cited

EndNote has created an output style for *Paleobiology* to assist in formatting your references, which is available for download from the Endnote website, <http://www.endnote.com/support/enstyles.asp>. Please do not use Cite-While-You-Write in the final submitted files.

- All works cited in the text, tables, figure captions, and appendices must be included in the Literature Cited section.
- Entries in the Literature Cited section (including Mac and Mc) are listed in strict alphabetical order, except in cases of three or more authors. For citations with the same senior author: group all the single-author citations in chronological order; group all the two-author citations alphabetically first and then chronologically; and group all the citations with three or more authors in chronological order only. For works published in the same year by the same author(s), the works are listed in alphabetical order (or in date order if this is obvious, e.g., consecutive articles in a journal or articles numbered I and II). To differentiate articles published in the same year by the same author(s), a lowercase letter follows the date.

- Smith, J. L. 1989a.  
\_\_\_\_\_. 1989b.  
\_\_\_\_\_. 1990.  
Smith, J. L., and J. P. Jones. 1979.  
Smith, J. L., and T. Smith. 1978.  
Smith, J. L., T. Freeman, and J. P. Jones. 1977.  
Smith, J. L., J. P. Jones, M. R. Johnson, and T. Freeman. 1978.  
\_\_\_\_\_. 1979.  
Smith, J. L., J. P. Jones, and T. Freeman, eds. 1980.

- The names of authors are in capital and lowercase letters. Authors' initials are separated by a space. Except for the first author, author initials come before surname. For articles in an edited

- volume, editors' initials precede surnames. Italicize "In" or "in" for citations in a book. (See examples below.)
- Use a dash to denote repeated author names. Use only one dash for exact duplicate of authors in the preceding citation, no matter how many authors.
  - Do not abbreviate the names of publications (journals, series).
  - Publishers' names:

a) Abbreviate the names of publishers. Blackwell Scientific is an abbreviated form; Blackwell is the abbreviated form for Basil Blackwell. Use Springer, **not** Springer-Verlag.

b) If necessary, retain initials to distinguish among publishers:

W. H. Freeman

J. Murray (Darwin's publisher)

c) Usually delete "Press" except for University presses. **But** Academic Press, **not** Academic.

- Do not underline (italicize) volume numbers for periodicals and series.
- State names are omitted if the city is large and well known or if the state name is part of the publisher's name. Traditional abbreviations of state names are used, not postal codes.
  - (Boston)
  - (Springfield, Mass.)
  - (University of Wisconsin Press, Madison)
  - (Marshfield, Wisc.)
- Include country names, if needed, for location of publisher, e.g., Wiley, Chichester, U.K.
- If three or more chapters of a book are cited, cite the book separately, and use an abbreviated citation of the book in the reference for the chapter.

Davidson, H. 1994. Motor psychology. Harley, Cucamonga, Calif.

Rider, E. Z. 1994. Life in fifth gear. Pp. 136-156 in Davidson 1994.

**Journal article:**

Storm, E. C. 1974. Omnology at the crossroads. *Journal of Omnology* 22:1-44.

**Article in a serial publication or a special publication with a volume citation (treat as if a journal):**

Foote, M. 2001. Origination and extinction components of taxonomic diversity: general problems. *In* D. H. Erwin and S. L. Wing, eds. Deep time: Paleobiology's perspective. *Paleobiology* 26(Suppl. to No. 4):12-26.

Smithson, A. B. 1995. Gymnosperm envy. *In* C. D. Jones, ed. *Advances in angiosperm psychology*. Short Courses in Paleontology 6:23-45. Paleontological Society, Knoxville, Tenn.

**Article in a serial publication without a volume citation (treat as if a book):**

Smithson, A. B. 1995. Gymnosperm envy. Pp. 23-45 *in* C. D. Jones, ed. *Advances in angiosperm psychology*. Proceedings of the 24th international symposium on fossil plants. Geological Society of America, Boulder, Colo.

**Book:**

Calm, I. M. 1974. *Omnology has passed its peak*. University of Chicago Press, Chicago.

**Article in a book:**

Storm, E. C. 1974. Whither goest omnology? Pp. 33-44 in I. M. Calm and U. R. Nott, eds. (Note order of editors' initials and names.)

**Special example on how to cite the *Treatise on Invertebrate Paleontology*:**

Arkell, W. J., B. Kummel, and C. W. Wright. 1957. Mesozoic Ammonoidea. Pp. L80-L465 in W. J. Arkell et al. *Mollusca 4, Cephalopoda, Ammonoidea*. Part L of R. C. Moore, ed. *Treatise on invertebrate paleontology*. Geological Society of America, New York, and University of Kansas, Lawrence. [Note that later parts are published in Boulder, Colo.].

**Tables**

- Each table is placed on its own page at the end of the text.
- Table captions are placed directly above the table and on the same page.
- Do not use parentheses around reference dates in the body of a table.

**Figures**

- On final submissions, list all figure captions together on a separate page (or pages) in numerical order.

**Footnotes**

Footnotes should be avoided except in tables.