

Critical Writing in Earth & Environmental Science

Noren, A., Bierman, P.R., Steig, E., Lini, A., and Southon, J., (2002), Millennial scale storminess variability in the northeastern United States during the Holocene epoch, **NATURE**

Clapp, E. M., Bierman, P.R., Schick, A. P. Lekach, J., Enzel, Y., and Caffee, M., (2000) Sediment yield exceeds sediment production in arid region drainage basins, **Geology**

Nichols, K. K., P. R. Bierman, R. L. Hooke, E. M. Clapp and M. Caffee (2002) Quantifying sediment transport on desert piedmonts using in situ produced ^{10}Be and ^{26}Al . **Geomorphology**

Jennings, K., Bierman, P., and Southon, J. (2003) Timing and style of deposition on humid-temperate fans, Vermont, U.S.A., **Geological Society of America Bulletin**

Gran, S, Matmon, A S., Bierman, P.R., D., Enzel, Y., Caffee, M., and Rizzo, D. (2001) Displacement history of a limestone normal fault scarp northern Israel from cosmogenic ^{36}Cl . **Journal of Geophysical Research**



Geology 371 (CRN 14405)
Wednesday, 6:15 to 9:15

Paul Bierman, Geology and Natural Resources, pbierman@uvm.edu, Variable Credit (1-3)

<http://www.uvm.edu/~pbierman/classes/critwrite>

This is a class about writing and how to make it better. It is appropriate for graduate students at all levels and for undergraduate students who are preparing senior theses. The goal of this course is to improve your writing by reading and commenting on the writing of others. In past years, this course has helped many students get their theses done and their papers published. It will include potluck dinners so no one will go home hungry!

The premise of the class is a simple one. We will spend the semester reading and editing papers written by current and former UVM students and faculty. The important difference between readings in this class and in other classes is that most of the papers you will be reading here have yet to be published. In fact, many of them have not even been submitted to a journal. Your input and constructive criticisms will make these papers a stronger part of the science literature and will help you learn what it takes to get your work through critical peer review.

Expectations and Evaluation Criteria

Your responsibility in this class is to approach each manuscript as though you were a reviewer for a professional journal. Each week, there will be a manuscript to edit. You are expected to prepare a thorough and helpful review of the manuscript. The review should be typed and at least a single-space page in length although most reviews will be longer. To produce such a review, do the following.

1. Read the manuscript quickly to familiarize yourself with its content and goals.
2. Read the manuscript slowly for a second time with a pen/yellow PDF stickies in hand. Make marginal notes where needed to correct grammar, punctuation, and sentence structure. To save paper, these can be electronic (on the pdf) or if you are more comfortable with paper, that's fine too.
3. For major comments and complaints, add a number to the manuscript and type your comments on a separate sheet.
4. Prepare your typed, formal review to include the following:
 - An introductory paragraph that describes what the paper is about and its main conclusions.
 - A second paragraph that presents your evaluation of the paper specifically in terms of: quality of data, logic of interpretations, writing clarity, clarity of illustrations.
 - A recommendation and justification of whether the paper should be accepted, accepted with major revisions, or rejected. This paragraph should be followed with a series of bullet points that clearly lay out any major changes are needed to improve the paper.
 - Indicate, what if anything needs to be done to make the paper compliant with the instructions to authors.

I expect that everyone of us will come to class each week with a completed, neatly typed review and annotated manuscript (paper or electronic). I expect that no later than the end of the day on each Wednesday, you will email me a copy of your review so that I can read it and so that I can post these to our class web site; these postings will let you see how each person approaches their reviews.

Please send or give the annotated reviews directly to the person whose paper you have reviewed. I don't need to see these.

For weeks that your paper is being reviewed, there are additional requirements.

1. At least one week before your paper is being reviewed in class, email Paul a PDF of your paper and the *Instructions to authors* for the journal to which the paper is being submitted. I will post both on our class web site so your classmates and I can do our reviews over the week before class.
2. Come to class the week before your paper is being reviewed prepared to give a several minute summary of your paper including why you wrote it, areas you would like reviewers to focus on during their reviews, and any interesting anecdotes about the research that led to the paper.

Learning Goals

The goals for this course are simple and straightforward.

- Understand how the journal review process works through hands-on practice reviewing papers being prepared for publication by your peers.
- Improve your skill and comfort level as an editor by reviewing numerous papers over the course of the semester.
- Gain familiarity with the requirements of journals by reading and assessing manuscript compliance with *Instructions to authors* for all the reviews that we do.
- Help your UVM peers get their papers published by providing feedback at a critical time in the paper preparation cycle.
- Have a good time and meet graduate students from different departments around campus.