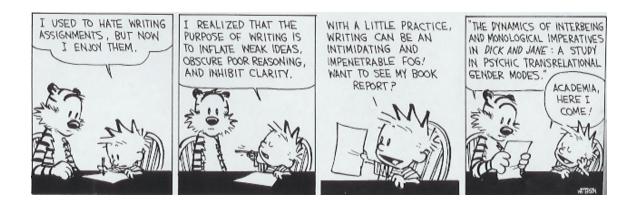
Syllabus: Reading and writing like an ecologist (Biology 384), Spring 2008



Course Description

Students usually learn from textbooks, but scientists communicate with each other through journal articles. The purpose of this class is to help you learn to read and write like a scientist (specifically, an ecologist). We will spend our time reading and discussing journal articles about three current issues in ecology, including papers from both empirical and theoretical perspectives. In addition to the science, we'll talk about strategies for being a better reader (e.g. how to keep reading when you encounter something you don't understand) and a better writer (e.g. what makes a paper well or poorly written).

Suggested prerequisite: Biology 216

Course Objectives

- To become more comfortable reading ecological journal articles, both empirical and theoretical. This includes knowing how to glean the basic assumptions and conclusions of a study without always understanding all of the technical details (i.e., the art of knowing what you can skip over and what you really have to sit down and try to understand).
- To develop the ability to read critically
- To develop scientific writing skills

Format

For each unit, I will provide a key paper ("level 0 paper") which we will read and discuss. Each of you will then choose two papers cited by the level 0 paper ("level -1 papers"), two

papers cited by the level -1 papers ("level -2 papers"), and one paper that cites the level 0 paper ("level 1 paper"), tracing a coherent thread of thought. You'll be writing a review article based on these, so please choose only research papers (no reviews, essays, or editorial material). Skimming the abstact, introduction, and conclusions of each paper, you will write a brief (one paragraph) summary of each, which you will send to me along with the citation and abstract. I'll choose one of these threads and we will read and discuss the level -2, -1, and 1 papers.

To help you learn to read critically and to stimulate discussion, you will email me three thoughtful questions on the reading by 5 PM the previous day. Please send me the questions in plain text, not as a Word document!

When we've finished reading, you will synthesize what you've learned and write a review article summarizing this train of thought. Your initial paper will be submitted to me as hypothetical journal editor. I will send your paper out for review to two fellow classmates, and I'll send their comments back to you along with brief comments of my own. As all scientists know, it is virtually unheard of for a journal to accept a paper for publication without revisions. After this peer review, you will revise your papers and resubmit them to me. Your grade will be based on your paper summaries, your participation in class discussions, your written questions about the papers, your papers (both drafts) and your work as a reviewer for other students.

Paper format: Please include page numbers and double-space your papers. This makes reviewing easier. Do include a title. Abstracts are not necessary, but if you would like to include one, you are welcome to.

Instructor

Robin Snyder office: 510 Millis phone: 368-8838 email: res29@case.edu

Office hours: Tues., 12–1, and Wed., 4–5, or by appointment. During the semester I am happy to meet with anyone enrolled in this course. I would like especially to meet with students with disabilities who are registered with the Coordinator of Disability Services (368-5230) and who may need individual arrangements.

Assessment

Active participation in class discussion: 10%

Written questions on the papers: 10%

Paper summaries: 10% Review papers: 70%

For each review paper, 30% of your grade will come from your first draft, 50% from your second draft, and 20% from your reviews of other students' papers.

Due dates

- First draft of the review for the "A" paper set due: 2/19/08.
- Reviews due: 2/21/08.
- Final draft due: 3/4/08.
- First draft of the review for the "B" paper set due: 3/25/08.
- Reviews due: 3/27/08.
- Final draft due: 4/8/08.
- First draft of the review for the "C" paper set due: 4/22/08.
- Reviews due: 4/24/08.
- Final draft due: 4/29/08.

Late policy: For paper second drafts, I take off 10% per day late. Reviews not turned in on time get no credit: your colleagues are depending on those, so the review deadline is strict. Likewise, I cannot accept late first drafts, for doing so would reduce the time that your colleagues have to complete their reviews.