

NRES 498/898 012 – Writing Science – Fall 2013

Friday 1-1:50; HH 228

Dr. Amy Burgin

burginam@gmail.com

HH 412; office hours by appointment

The goal of this class is to make you a better writer. Writing is the core of how we communicate our scientific findings; fostering good writing skills now will help you throughout your career regardless of if you remain in academia. We will focus our effort on a recent text, *Writing Science: How to write papers that get cited and proposals that get funded* by Dr. Joshua Schimmel. This book is required for the class and is about \$25 on Amazon.

Date	Chapters or Papers	Leader
8/30	Read Chapters 1&2 and All 7 papers. Complete Exercise 2.1	No Class – Reading
9/6	Read Chapters 1&2 and All 7 papers. Complete Exercise 2.1	Christa Webber
9/13	Read Chapter 3. Complete Exercise 3.1	Jeff Hartman
9/20	Read Chapter 4, Complete exercises 4.1	Brian Hammond
9/27	No class, but larger assignment for following week	AB Gone, no class
10/4	Chapters 5-6; 5.1, 5.3, 6.1	Karla Jarecke
10/11	Chapters 7-8, 7.1, 8.1	Meg Andrews
10/18	Chapters 9-10, 9.1, 10.1	Stephen Siddons
10/25	Chapter 11, ex 11.1, 11.3	Kaycee Reynolds
11/1	Chapter 12; ex 12.1, 12.3, 12.4	Will Smith (?)
11/8	Chapters 13&14; 13.1,14.1	
11/15	Chapters 15-17 15.1, 15.3, 16.2	
11/22	Chapters 18-19	
12/6	Chapters 20-21; Exercise 20.1	

The class is pass/fail and you will be evaluated on attendance and participation in discussion. Most of the assigned exercises are discussions of the same seven papers we'll focus on all semester (see list below). Before the first class period, you need to read all seven papers and the first two chapters of the text. When it is your week to lead, I expect you to come prepared to initiate discussion. Occasionally there will be some editing or small writing exercises (Ch 5, 11, 12, 16). When these are assigned, please prepare them in writing and bring them with you to discussion.

Assigned papers for the group exercises:

1. Schimel J.P. and J. Bennett. 2004. Nitrogen mineralization: challenges of a changing paradigm. *Ecology* 85(3): 591-602. (Well-regarded ecologist [author of your text], also fits the bill as a synthesis paper. Cited over 750 times.)
2. Carpenter, S.R., N.F. Caraco, D.L. Correll, R.W. Howarth, A.N. Sharpley, and V.H. Smith. 1998. Nonpoint pollution of surface waters with phosphorus and nitrogen. *Ecological Applications* 8(3): 559-568. (Well-regarded ecologist; a paper that is mid-way between a synthesis and a data-oriented paper. Cited nearly 3000 times.)

3. Ryals R. and W.L. Silver. 2013. Effects of organic matter amendments on net primary productivity and greenhouse gas emissions in annual grasslands. *Ecological Applications* 32(1): 46-59. (This is a paper authored by a graduate student and her advisor. It is just out, so I don't report citations. This is included because it is analogous to something that you might be expected to produce from your thesis.)
4. Humphries, P., A. Richardson, G. Wilson and T. Ellison. 2013. River regulation and recruitment in a protracted-spawning riverine fish. *Ecological Applications* 23(1): 208-225. (This is published in the same edition of *EA* as #3. It is included for comparison.)
5. McIsaac G.F., M.B. David, G.Z. Gertner and D.A. Goolsby. 2001. Nitrate flux in the Mississippi River. *Nature* 414: 166-7. (Cited 159 times.)
6. Robertson, G.P., A.E. Paul, R. R. Harwood. 2000. Greenhouse gases in intensive agriculture: Contributions to the radiative forcing of the atmosphere. *Science* 289: 1922-1925. (Included as a slightly longer "report" in *Science*, cited over 800 times.)
7. Wenneras C. and A. Wold. 1997. Nepotism and sexism in peer-review. *Nature* 387: 341- 343. (This should make for some good discussion, as well as a good contrast to #5 & #6. Cited 838 times.)