Seminar in the Challenges of Writing Science

Assignment 1: Seminar

This assignment is conducted in pairs.

You are to choose, in conjunction with your professor, one of these topics for a seminar presentation. With your partner, prepare a 20-30 minute presentation on this topic (complete with visual aids) and a set of questions for group discussion (for a further 20-30 minutes), and an exercise which demonstrates the ideas you are discussing. These MUST be delivered on the due date; there is no extension for this assignment apart from medical emergency or family bereavement. I will provide you with a set of readings to get you thinking, but you are also expected to show initiative eg talking to a scientist about their views or looking for more information. I am available for discussion about the seminar presentation; you should contact me with any concerns.

You should hand in an individual paper based on your presentation one week after it has been delivered to the class. You should incorporate any useful new ideas which arose from the class discussion into your paper.

Seminar topics

1. In what way(s) is science collaborative? (Class 3A)
2. Is science constructed only by the interaction of the scientist with nature – or by the interaction of the scientist with the scientific community? (Class 3B)
3. Is there a place for metaphor in science? (Class 4A)
4. How has scientific reporting changed over time (and what does this tell us about changes in the nature of science)? (Class 4B)
5. Scientists have been described as “standing on the shoulders of giants”. What do this mean? What relationship does a scientific author have with writers of the past? (Class 5A)
6. The structure of the research article – and why it is shaped that way (Class 5B)
7. Issues of scientific style 1 (Class 5B)
8. The key features of the method, results, and discussion sections of the research paper (Class 6A)
9. What is the function of figures and graphics in science? (Class 6B)
10. Issues of scientific style 2 (Class 7B)

Due date: as specified by your topic
Marks: 15% of your final grade.
Reading list

You should take these readings as starting points only for your research; further research, either by talking to an expert, or reading more widely, is expected.

11. In what way(s) is science collaborative? (Class 3A)

Reading:  
*pp.17-22 textbook*  
*Foreword in Best American and Nature Writing*

12. Is science constructed only by the interaction of the scientist with nature – or by the interaction of the scientist with the scientific community? (Class 3B)

Reading:  
*pp. 3-17 textbook*  
*Greg Myers: Social Construction of Two biology articles*  
*pp. xi – xxviii R. Harris*

13. Is there a place for metaphor in science? (Class 4A)

Reading:  
*Metaphor: Constituting or decorating theory in science*

14. How has scientific reporting changed over time (and what does this tell us about changes in the nature of science)? (Class 4B)

Reading:  
*Charles Bazermann: Reporting the experiment*  
*Articles on freemartins*

15. Scientists have been described as “standing on the shoulders of giants”. What do this mean? What relationship does a scientific author have with writers of the past? (Class 5A)

Reading:  
*pp. 83-91 textbook*

16. The structure of the research article – and why it is shaped that way (Class 5B)

Reading:  
*pp.40-68 textbook*  
*Section 2: Katz*  
*Part 11 Robert Day*

17. Issues of scientific style 1 (Class 5B)

Reading:  
*Chapters 5-7 Michael Alley*

18. The key features of the method, results, and discussion sections of the research paper (Class 6A)

Reading:  
*pp.40-68 textbook*  
*Section 2: Katz*  
*Part 11 Robert Day*
19. What is the function of figures and graphics in science? (Class 6B)

**Reading:**  
*pp 85-99 Day*  
*pp. 25-49 Katz*

20. Issues of scientific style 2 (Class 7B)

**Reading:**  
*Chapters 7-9 Alley*