WRI 1100 2017: DISCIPLINARY RESEARCH AND WRITING SEMINAR

Topic: Interdisciplinary Science Writing, 5 Credits

Lecture: Bertona 1, 9:30-10:50

Faculty Ben McFarland Eaton 103 281-2749 bjm@spu.edu

Office Hours Mondays 2-3pm; Fridays 11am-12pm; and by appointment

Description

This course continues the academic inquiry and writing skills of WRI 1000 by incorporating the elements and standards of college-level research and writing within a disciplinary context. Students use writing throughout the term as a tool to investigate and communicate information and ideas and to approach and answer complex questions. Key elements include learning to develop good research questions and lines of inquiry; writing in appropriate disciplinary genres; understanding the proper use of primary and secondary sources; evaluating, summarizing, analyzing, and synthesizing research; revising writing so as to develop and deepen ideas; and producing a culminating paper or project.

In this section of 1100, we will compare science writing from different disciplines and for different audiences. Our major text is *A World from Dust: How the Periodic Table Shaped Life*, which we will read chapter by chapter through the first half of the course, along with various readings about science for different audiences. During the second half of the course you will gather information about the **geology, chemistry, and biology** of a particular element, and then will write about these as **reviews** for advanced readers. These assignments culminate in two assignments that integrate the previous information on the "natural history" of that element into a **final report** for general readers and **presentation** for the class.

Outcomes

1. Gain Rhetorical Knowledge

Understand and use the appropriate types of writing (genres) that chemists, biologists, and geologists use to communicate knowledge and ideas.

2. Practice Critical Inquiry

Understand the types of questions and problems that are important in the natural sciences.

Locate, analyze, evaluate, synthesize, and use disciplinary research materials commonly employed by natural scientists.

3. *Understand and Use the Writing Process*

Develop a researched writing project through multiple drafts, using writing as a tool for the discovery, refinement, and communication of ideas.

4. *Gain Skill with Writing Conventions*

Produce writing that is suitable for the field, occasion, or genre in its use of claims, evidence, structure, diction, and citation.

Texts Greene, Stuart, and April Lidinsky. *From Inquiry to Academic Writing: A Practical Guide*, 3rd ed., Bedford/St. Martin's, 2014. (Including a code for the website *Writer's Help.*)

McFarland, Ben. A World from Dust: How the Periodic Table Shaped Life. Oxford University Press, 2016.

Assessment

This course sets higher standards for writing than you've probably experienced before. It's not uncommon for papers and other writing that might have earned an A in high school to be considered no better than a C in college. Your writing will be assessed against the course outcomes listed above. Here's how the Writing Program defines each grade level:

A = superior attainment

B = meritorious attainment

C = adequate attainment

D = minimal attainment

E = insufficient attainment, no credit

Note that "meritorious" means commendable or praiseworthy: a B, in other words, reflects a well-written paper, not an average result. You must earn a C- in order to pass WRI 1100.

Reading quizzes (one per AWfD chapter): 12 @ 5 points each = 60 points Annotated bibliographies (draft and final): 2 @ 30 points each = 60 points Review articles (chemistry, geology, and biology): 3 @ 60 points each = 180 points

Presentation: 100 points Final "natural history" essay: 200 points Class participation: 150 points

Class participation.

TOTAL: 750 points

Grading

```
700-750 points
                  >~93%
                              Α
675-699 points
                  >90%
                           = A-
650-674 points
                  >~87%
                           = B+
                  >~83%
625-649 points
                           = B
                  >80%
                           = B-
600-624 points =
575-599 points
                  >~77%
                           = C+
550-574 points
                  >~73%
                           = C
525-549 points =
                  >70%
                           = C-
500-524 points
                  >~67%
                           = D+
450-499 points =
                  >60%
                           = D
                           = E
<450 points
                  <60%
```



Resources

THE WRITING CENTER (Lower Moyer Hall) is an excellent resource for working on your writing with an experienced consultant. Call 206-281-2475 or stop by the Center for Learning front desk for more information.

DISABILITY SUPPORT SERVICES (Lower Moyer Hall) provides educational access through support, resources, advocacy, collaboration, and academic accommodations for students with disabilities. Call 206-281-2272 or 206-281-2224 (TTY). Email: dss@spu.edu.

THE STUDENT COUNSELING CENTER (Watson Hall) is dedicated to student well-being and providing services collaboratively with compassion, respect, and sensitivity to students' unique challenges and cultural backgrounds. Call 206-281-2657 or email scc@spu.edu.

Policies

LATE WORK: All major assignments must be complete to pass the course. Late assignments will not receive commentary from the instructor, which will significantly impact your ability to revise those assignments later in the course.

ATTENDANCE: When we convene as a class, we say, think, and do things we could not do individually. We workshop our writing, we read together, we practice the thinking that is important for college success—building rhetorical knowledge, enacting critical inquiry, working through the writing process, negotiating conventions in a given situation. Because our community does what we cannot do alone, class time is limited and valuable. You are expected to be present—physically and intellectually—at every class meeting. Each student will be afforded one week's worth of absences (i.e. three absences for a MWF class, two absences for a TTh class). Additional absences will lower your final grade at the discretion of the instructor. The Writing Program does not distinguish between "excused" and "unexcused" absences. Use your absences judiciously, if at all. Arrive on time. Excessive tardiness can result in an absence in the grade book, as can inappropriate use of technology in class.

In this section of WRI 1100, your writing will follow a number of sequenced assignments leading up to a final paper due finals week. In WRI 1100, participation has two components: timeliness and attendance. Regarding timeliness, all assignments must be turned in on time. Late work will not receive my written commentary and each late or incomplete assignment will lower your final grade 2%. All major assignments (listed above) must be complete to pass the course.

Regarding attendance, when we convene as a class, we say, think, and do things we could not do individually. We workshop our writing, we read together, we practice the thinking that is important for college success—building rhetorical knowledge, enacting critical inquiry, working through the writing process, negotiating conventions in a given situation. Because our community does what we cannot do alone, class time is limited and valuable. You are expected to be present—physically and intellectually—at every class meeting. Each student will be afforded one week's worth of absences (three absences for our MWF class). Each additional absence will lower your final grade 2%.

The Writing Program does not distinguish between "excused" and "unexcused" absences. Use your absences judiciously, if at all. Arrive on time. Inappropriate use of technology will be counted as an absence (since you are not intellectually present) and will lower your final grade 2%.

PLAGIARISM: The Writing Program distinguishes between unintentional and intentional plagiarism. Unintentional plagiarism a conventional issue, one that can be addressed through instruction on citation. Remember, you must cite your sources, even when paraphrasing. We will address citation in class, and if you need assistance beyond classroom instruction, please consult a handbook, set up an appointment at the Writing Center, and / or speak with me. Intentional plagiarism, however, is a breach of trust and integrity, a violation of the atmosphere of scholarship we work hard to establish and maintain at the University. If the instructor verifies an act of academic dishonesty has occurred, the Department Chair, Dean, Provost, and Dean of Students will each be notified. Depending on the severity, plagiarism can result in failing an assignment or failing the course.

Cheating and plagiarism will not be tolerated: you must write your own essays and reports. **Do not cut and paste from other publications without using quotes and citations.** This is especially important when recounting *procedures in lab reports*: you must use your own words to demonstrate mastery of the techniques. When writing lab report, even slight modification of a central template by lab partners is plagiarism, and any highly similar passages shared among lab partners will result in a significant grade penalty. (You may discuss the thinking behind the writing freely, but you must do your own graphs and writing.) More on the policy regarding cheating and plagiarism is posted in the Undergraduate Catalog.

An incomplete grade is possible only if the current grade is C- or better and you have a verifiable emergency reason.

Course Evaluations

The following is a statement of general SPU policy that I offer as part of the contract that is this syllabus: It is my expectation that you will participate in an online evaluation of this course and its instructor in a thoughtful and constructive manner. The evaluation data is used to make improvements in the course. Courses are evaluated using the Banner Course Evaluation System. All answers are completely confidential - your name is not stored with your answers in any way. In addition, I will not see any results of the evaluation until after final grades are submitted to the University.

Emergency

In the case of an emergency or an emergency drill, please note the presence of your lab partner, leave the classroom and reassemble in the parking lot near Bertona.

Weather Closures

Information on weather-related campus closures can be obtained by calling 281-2800 early in the morning.

Schedule – WRI 1100 Winter Quarter 2017

Date	Day	Topic	Reading	AWfD
W 1/4	1	Course Introduction, writing exercise as WRI 1000 review		
		"What is Natural History?" and "What is science writing?"		
F 1/6	2	LIBRARY CLASSROOM: How to read technical writing,	Mitchell	
		and comparing blog/news writing to technical writing	and	
		Bring Roller Coaster article (Mitchell and Wartinger)	Wartinger	
		(with Science Librarian Carrie Fry)		
M 1/9	3	Bring AWfD & Roller Coaster article	Mitchell	Quiz on
		Compare Roller Coaster article to Arsenic Life process	and	Chapter 1
		Parts of a journal article and scientific process	Wartinger	
W 1/11	4	Bring Hoffman article & Roller Coaster article	Hoffman	
		Compare Roller Coaster article to Hoffman for medicine vs.	article on	
		chemistry	chemistry	
		Diagrams and graphs: Make a graph from Roller Coaster article	writing	
F 1/13	5	Mythbusters and the Scientific Method	Watch	Quiz on
		As you watch, write what they did step by step and what	Myth-	Chapter 2
		happened, and bring to class	busters	
M 1/16		Martin Luther King Jr. Day (Holiday)		
W 1/18	6	LIBRARY SEMINAR ROOM: Searching around a starting		Quiz on
		reference		Chapter 3
		(with Science Librarian Carrie Fry)		
		Start to collect refs for Annotated Bibliographies		
		BRING AWfD & laptop if possible		
F 1/20	7	Bring three primary/secondary reference pairs printed out	Burundi	
		Edit "How the Biochemist Came to Burundi"	essay	
M 1/23	8	Roger Wiens ASA Talk about Mars, geology, chemistry, and		Quiz on
		funding		Chapter 4
W 1/25	9	LIBRARY SEMINAR ROOM: Filling in holes in the story		
		Expanding your search and narrowing your focus		
		Filtering info and finding/critiquing/evaluating an info source		
		Continue to collect refs for Annotated Bibliographies		
E 4 /0.5	4.0	BRING AWfD & laptop if possible	g	
F 1/27	10	"Natural History is Dying, and We are All the Losers": Compare	SciAm	
		blog to paper and discuss implications	blog and	
3.5.1/20	11		paper	0.
M 1/30	11	Comparing levels of writing: popular science and graphic novel	Gould and	Quiz on
		Universe Verse I & II + AWfD Ch. 5	Universe	Chapter 5
XX 0 /1	10	Read Gould: "Will We Figure Out How Life Began?" (online)	Verse	
W 2/1	12	LIBRARY SEMINAR ROOM: Citations workshop		
		Bring Annotated Bibliography Draft formatted in Author-		
F 2 /2	10	Date ACS Style BRING AWfD & laptop if possible		0 :
F 2/3	13	Monty Hall effect, statistics and probability and prediction		Quiz on
		Annotated Bibliography Draft DUE		Chapter 6



		NIVERSIIY		
M 2/6	14	Analyze structure of a primary lit article you found in the library	'Informal'	
		using "Is Academic Writing Becoming More Informal?" paper	paper	
		Make a list of possible things to analyze from the article		
W 2/8	15	Continue to analyze structure of primary lit article using	Gopen	Quiz on
		American Scientist (Gopen and Swan) as template	and Swan	Chapter 7
		Make a list of possible things to analyze from the article		
F 2/10	16	Final Annotated Bibliography DUE		
		Watch Fast, Cheap, and Out of Control and look for a common		
		thread		
M 2/13	17	Finding a common thread in your chemistry references and		Quiz on
		outlining your "chemistry" review		Chapter 8
W 2/15	18	Hype and the Artificial Leaf	Nocera	
			readings	
F 2/17	19	Natural History of an Element (Intro/Chem) Review DUE		Quiz on
		Audrey Bowden ASA talk: "Imag(in)ing a Brighter Future for		Chapter 9
		Healthcare"		
M 2/20		Presidents Day (Holiday)		
W 2/22	20	2 Gould essays: The Cambrian Explosion and "Dinomania"	http://bre	Quiz on
		(chaos theory and progress/intent) (online)	mbs.net/g	Ch. 10
			ould.html	
F 2/24	21	Natural History of an Element (Geology focus) Review DUE		
		Bill Newsome ASA talk: "Of Two Minds: A Neuroscientist		
		Balances Science and Faith"		
M 2/27	22	Discuss Chloe's project + Universe Verse III	Readings	Quiz on
			+ Univ.	Ch. 11
			Verse III	
W 3/1	23	Ph.D. Movie Part 1 and discuss what science academia is like		
F 3/3	24	Ph.D. Movie Part 2 and discuss		Quiz on
		Natural History of an Element (Biology focus) Review DUE		Ch. 12
M 3/6	25	Scientific Debates: Gould vs. AWfD	Wright	
		"Can Evolution Have a Higher Purpose?" "Eight Little Piggies"	and Gould	
W 3/8	26	Writing for a Different Audience: Thing Explainer and "Up		
		Goer Five"		
F 3/10	27	Preparing for presentations (What stands out from ASA talks?)		
M 3/13	28	Presentations		
R 3/16	29	9-10am: More Presentations and Final paper Due		



Emergency Preparedness Information

REPORT AN EMERGENCY OR SUSPICIOUS ACTIVITY

Call the Office of Safety & Security (OSS) at 206-281-2922 to report an emergency or suspicious activity. SPU Security Officers are trained first responders and will immediately be dispatched to your location. If needed, the OSS Dispatcher will contact local fire/police with the exact address of the location of the emergency.

LOCKDOWN/SHELTER IN PLACE—GENERAL GUIDANCE

The University will lock down in response to threats of violence such as a bank robbery or armed intruder on campus. You can assume that all remaining classes and events will be temporarily suspended until the incident is over. Lockdown notifications are sent using the SPU-Alert System as text messages (to people who have provided their cell phone numbers as described below), emails, announcements by Building Emergency Coordinators (BECs), and electronic reader board messages.

If you are in a building at the time of a lockdown:

- Stay inside and await instruction, unless you are in immediate visible danger.
- Move to a securable area (such as an office or classroom) and lock the doors.
- Close the window coverings then move away from the windows and get low on the floor.
- Remain in your secure area until further direction or the all clear is given (this notification will be sent via the SPU-Alert System).

If you are unable to enter a building because of a lockdown:

- Leave the area and seek safe shelter off campus. Remaining in the area of the threat may expose you to further danger.
- Return to campus after the all clear is given (this notification will be sent via the SPU-Alert System).

EVACUATION—GENERAL GUIDANCE

Students should evacuate a building if the fire alarm sounds or if a faculty member, a staff member, or the SPU-Alert System instructs building occupants to evacuate. In the event of an evacuation, gather your personal belongings quickly and proceed to the nearest exit. Most classrooms contain a wall plaque or poster on or next to the classroom door showing the evacuation route and the assembly site for the building. Do not use the elevator.

Once you have evacuated the building, proceed to the nearest evacuation location. The "Stop. Think. Act." booklet posted in each classroom contains a list of evacuation sites for each building. Check in with your instructor or a BEC (they will be easily recognizable by their bright orange vests). During emergencies, give each BEC your full cooperation whenever they issue directions.

SPU ALERT SYSTEM

The SPU-Alert System provides notification by email and text message during an emergency. Text messaging has generally proven to be the quickest way to receive an alert about a campus emergency. To receive a text message, update your information through the Banner Information System on the web, https://www.spu.edu/banweb/. Select the Personal Menu then choose the Emergency Alert System. Contact the CIS Help Desk if you have questions concerning entering your personal contact information into the Banner Information System.

ADDITIONAL INFORMATION

Additional information about emergency preparedness can be found on the SPU web page at http://www.spu.edu/info/emergency/index.asp or by calling the Office of Safety & Security at 206-281-2922Alert System. Contact the CIS Help Desk if you have questions concerning entering your personal contact information into the Banner Information System.