

Scientific Writing BMSC 8216

Course and Contact Information:

Course: **Scientific Writing BMSC 8216**
Semester: **Fall 2019**
Meeting time: **10:30am-12pm**
Location: **Online WebEx**

Instructor:

Name: **Linda Kusner**
Campus Address: **Ross Hall, Room 725**
Phone: **202-994-6768**
E-mail: lkusner@gwu.edu
Office hours: request

Bulletin course description:

Instruction in the basic skills of scientific writing, integration with laboratory rotation (BMSC 8215) report writing.

Course prerequisites, if any:

Enrollment in the PhD program in Biomedical Sciences or permission of instructor

Learning outcomes that state descriptions of behaviors or skills that students will be able to demonstrate at the end of the class or unit:

As a result of completing this course, students will be able to:

- 1. Construct a scientific research article which includes abstract, introduction, materials and methods, results and discussion**
- 2. Organize data into a figure or table**
- 3. Employ knowledge of grammatical rules and logical flow in scientific writing**

Required textbooks, materials, and recommended readings:

| Author | Title | Edition |
|-------------------------|--|---------|
| Stephen B. Heard | <i>The Scientist's Guide to Writing</i> | |

Supplemental course learning materials

| Author | Title | Edition |
|--|---|-----------------------|
| William Strunk and E.B. White | <i>The Elements of Style</i> | Fourth Edition |
| J.R. Matthews and R.W. Matthews | <i>Successful Scientific Writing</i> | Third Edition |
| Jane Straus | The Blue Book of Grammar and Punctuation | |

Average minimum amount of out-of-class or independent learning expected per week:

Students are expected to spend a minimum of 100 minutes of out-of-class work for every 50 minutes of direct instruction, for a minimum total of 2.5 hours a week.

Remote, online, and hybrid course additional information:

1. Blackboard will include syllabus, lecture PowerPoint, assignments, and recorded WebEx lectures.
2. Software required the course.
 - a. Adobe Creative Cloud
 - b. Statistical Analysis System
 - c. Citation manager
 - d. PowerPoint
 - e. Word
3. Link to student support online.gwu.edu/student-support
4. Accessing and participating in the course will be through WebEx. Announcement of link will be provided by invitation. Students are required to have microphone and video technology.
5. Class Session Recordings: Course lectures may be audio/video recorded and made available. As part of your participation in this course, you may be recorded. Students are prohibited from recording/distributing any Class Activity without permission from the instructor, except as necessary as part of approved accommodations for students with disabilities. Any approved recordings may only be used for the student's own private use.

Week-by-week schedule of topics:

| Date | Readings (prior to class) | Assignment(s) Due Monday at 5 PM |
|---------|---|--|
| Sept 1 | What not to do in graduate school Intro to class, references and word doc review | Essay question (#1) |
| Sept 8 | Part II. Behavior Writing Behavior | Understanding your writing behavior (#2) |
| Sept 15 | Chapter 17 and 18 Paragraph and sentence structure | Introduction paragraph (#3) |
| Sept 22 | Chapter 19 and 20 Words and phrases | Rewrite introduction paragraph (#4) |
| Sept 29 | Chapter 7-9 Review of manuscript and set up | Project paragraph (#5) |
| Oct 6 | Part V. Revision How to revise | Rewrite project paragraph (#6) |
| Oct 13 | Chapter 10 Introduction and presentations | Introduction power point slide (#7) |
| Oct 20 | Wild R. (2018) The extra bits of a grant application: a cheat sheet. <i>AND</i> Sample NIH F31 grant (2011) Overview of grants | Abstract for a grant (#8) |
| Oct 27 | Chapter 11 Methods | Method section (#9) |
| Nov 3 | Figure and table formatting | Figure/Table (#10) |
| Nov 10 | Chapter 12 Results | Results section (#11) |
| Nov 17 | Abstracts and presentations | Abstract (#12) |
| Nov 24 | Chapter 13 and 14 Discussion (Katrin's presentation) | Discussion (#13) |
| Dec 1 | No reading assignment | Presentations |

Assignments

All assignments are due Monday by 5 pm by email (lkusner@gwu.edu).

10% reduction/day for late completions

Assignments are double spaced, 12pt and Arial font. Place name and email in header right corner. All citations need to follow PNAS format. Failure to adhere to formatting will result in reduction of score.

| Assignment | Description | Total Points |
|---|--|--------------|
| #1: Essay Question | One page answer to the question that will be provided in class | 5 pt |
| #2: Understanding your writing behavior | Essay that describes your writing behavior | 5 pt |
| #3: Introduction paragraph | The paragraph should be at least four sentences describing the focus of your <i>lab rotation</i> . | 5 pt |
| #4: Rewrite Introduction paragraph | EDITS | 5 pt |
| #5: Paragraph on project | The paragraph should be at least four sentences describing the focus of <i>your project</i> . | 5 pt |
| #6: Rewrite project paragraph | EDITS | 5 pt |
| #7: Introduction section slide | One power point slide on the introduction | 10 pt |
| # 8: Abstract for a grant | Provide an abstract with introductory paragraph and specific aim(s). | 10 pts |
| #9: Method section | Descriptive paragraphs of all methods performed | 10 pt |
| #10: Figure/Table | A figure or table representation obtained in lab rotation (original image) | 10 pt |
| #11: Results section | From the produced figures and/or tables, a clear description of the results | 10 pt |
| #12: Abstract section | One paragraph that summarizes the lab report | 10 pt |
| #13: Discussion section | Minimum of two paragraphs that provide interpretation and conclusion | 10 pts |
| Presentation | 10 minute PowerPoint presentation of lab | 20% of grade |
| Lab Rotation Report | Same Report due for BMSC 8215 | 20% of grade |

GRADING

- **Class participation (10%)**
 - **Short presentations**
 - **Warm-up writing (done outside of class)**
 - **Classroom editing (done outside of class)**
- **Assignments (50%)**
 - **Failure to adhere to formatting will result in reduction of score.**
 - **Late assignments will receive a 10% reduction/day**
- **Presentation (20%)**
 - **5 minute presentation of the lab rotation**
- **Lab rotation report (20%)**
 - **Same report as required by BMSC 8215**

There is NO final exam in this class

University policy on observance of religious holidays

In accordance with University policy, students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. For details and policy, see: students.gwu.edu/accommodations-religious-holidays.

Academic integrity code

Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For details and complete code, see: studentconduct.gwu.edu/code-academic-integrity

Safety and security

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.

Support for students outside the classroom

Disability Support Services (DSS)

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information see: disabilitysupport.gwu.edu/

Mental Health Services 202-994-5300

The University's Mental Health Services offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. For additional information see: counselingcenter.gwu.edu/