

# Course Information (Spring 2024)

Course Number:	VIBS 655
Course Title:	Preparing Scientific Papers and Presentations
Section:	601
Time:	Mondays, 9:00-11:45 a.m.
Location:	VIDI 328
Credit Hours:	3

## **Instructor Details**

Instructor:	Barbara Gastel, MD, MPH
Office:	VIDI 397
Phone:	979-845-6887
E-Mail:	b-gastel@tamu.edu
Office Hours:	Appointments in person, by Zoom, and by phone are readily available.
	Also feel free to drop in if I am in the office and not meeting with others.

## **Course Description**

Writing and placement of journal articles in student's research field; preparation of oral and poster presentations; basics of writing grant proposals; other aspects of scientific communication.

## **Course Prerequisites**

Graduate classification.

(Note: To complete the work for this course, you must have a finished research project ready to write up for journal publication.)

## **Course Learning Outcomes**

After successfully completing this course, you will be able to do the following:

- Write a scientific paper with appropriate content and organization of each section
- Follow principles of writing readably about science
- Describe the publication process for journal articles in the sciences
- Follow sound practices for preparing and giving scientific oral and poster presentations
- State principles of ethical communication in science



# Textbook and/or Resource Materials

The textbook for this course is *How to Write and Publish a Scientific Paper*, 9th edition, by Barbara Gastel and Robert A. Day (Greenwood Press, 2022). This book is available online through the Texas A&M libraries. In addition, each class member can receive a hard copy of this book free of charge.

Access to other readings, such as articles on aspects of scientific writing, will be provided via Canvas.

## **Grading Policy**

This course is graded A through F. Final averages and the corresponding final grades are as follows: 89.50% or above, A; 79.50–89.49%, B; 69.50–79.49%, C; 64.50–69.49%, D; and below 64.50%, F.

The graded items and their weights are as follows:

<u>Assignment</u>	<u>Due</u>	Percent	Equivalent in Points
draft of informal abstract	1/28	1%	10
set of annotations	2/4	4%	40
draft of methods section	2/11	2%	20
revised informal abstract	2/18	2%	20
revised draft of methods section	2/25	5%	50
draft of results section	3/3	2%	20
draft of discussion	3/17	2%	20
draft of introduction	3/24	2%	20
revised draft of results section	3/31	5%	50
revised draft of discussion	4/7	5%	50
revised draft of introduction	4/14	5%	50
abstract	4/21	5%	50
final version of paper	5/3	35%	350
oral presentation	2/26–4/15	15%	150
discussion posts	weekly	10%	100
TOTAL		100%	1000

Please double-space all writing assignments and use an unjustified right margin. Also, please use margins of at least 1 inch. The preferred font for this course is 12-point Times New Roman.

Discussion posts normally will be due Fridays, with a grace period until 5 p.m. Saturday. Writing assignments normally will be due at 8 p.m. Sunday. Early submissions are welcome.

## Late Work Policy

Except in cases of excused absences, 10% of the maximum available points for an assignment will be deducted for each 24 hours or portion thereof that an assignment is late.

Work submitted by a student as makeup work for an excused absence is not considered late work and is exempted from the late work policy (<u>Student Rule 7</u>).



# **Course Schedule**

### Introductory Notes

This course is designed primarily to increase your ability to write papers for journals. Other goals include increasing your knowledge of the academic publication process, enhancing your skill at other professional communication (such as presentations and grant proposals), increasing your ability to edit or peer review others' work, and helping you to refine or maintain your English-language skills. I hope that you will find this course helpful and that you will share information from it with others.

The goals of this course will be pursued through presentations, small-group discussions ("workshops"), reading assignments, discussion posts, and writing assignments. Because your and others' learning will depend in part on your class participation, you will be expected to attend the course regularly; normally, no more than two sessions should be missed. However, if you are ill, please stay home; I will be glad to have you join us by Zoom if your condition permits.

Communications outside of class sessions will be mainly by email. Therefore, please check your Texas A&M University email at least once a day. When emailing about class items, please start the subject line with "VIBS 655" (Example: VIBS 655—Question about Reading).

The success of a course such as this one depends on the class members as well as the instructors. Suggestions for making the course more useful and enjoyable are welcome at any time.

### Schedule

### Date/Session Main Activities and Assignments

 Mon, Jan 22 Introductions: The Participants and the Course
 (01) Presentation/Discussion: Deciding When and Where to Submit a Paper Exercise: Defining the Focus and Contribution of Your Paper Presentation/Demonstration: Journals' Instructions to Authors Overview: The Structure of Papers Introduction: Drafting an Abstract

### Fri, Jan 26 Reading Due (note: all listed reading is in the textbook unless stated otherwise)

- Preface
- A Word to International Readers
- Chapter 3: Approaching a Writing Project
- Chapter 6: Where to Submit Your Manuscript
- Chapter 9: How to Prepare the Abstract
- Chapter 34: How to Write Science in English as a Foreign Language

Browsing Due: papers in the journal for which you are writing a paper

Instructions: Look at some papers in the journal for which you hope to write your paper. Identify a paper that you think would be a good model for yours.

#### **Discussion Post #1 Due**

Note: This post is to include a link to or copy of the paper chosen as a model.



- Sun, Jan 28 Writing Due: draft of an informal abstract on the research on which you'll write a paper Instructions: Please draft an informal abstract of the research about which you will write a paper. The abstract should run about 250 words (1 double-spaced page). If appropriate, use the following headings: Background, Methods, Results, and Conclusions.
- Mon, Jan 29 Workshop and Discussion: Instructions to Authors
   (02) Presentation/Discussion: Approaching a Writing Project Presentation/Discussion: Writing in English as a Foreign Language—or Working with Colleagues Who Do So Presentation/Discussion: Providing Feedback on Drafts Workshop: Class Members' Drafts of Informal Abstracts

### Fri, Feb 2 Reading Due

- Chapter 11: How to Write the Materials and Methods Section
- Chapter 28: How to Prepare a Poster
- "Preparing the Four Main Parts of a Scientific Paper (IMRAD): Concise Advice" (available at <u>https://www.authoraid.info/en/resources/details/1322/</u>)
- annotated journal article (posted at <u>http://www.authoraid.info/uploads/resources/annotated-journal-article-1.pdf</u>)

#### Discussion Post #2 Due

Note: This post is to include links to instructions to authors from 3 journals in your field. One set of instructions should be from the journal to which you hope to submit the paper about your research.

Sun, Feb 4	Writing Due: set of at least 10 annotations Instructions: Using as a model the annotated journal article looked at, prepare at least 10 annotations of the journal article that you are using as a model in this course. In the annotations, you should note items that the journal article does appropriately. The 10 or more annotations should include annotations in each major part of the paper and may include annotations in other parts.
Mon, Feb 5 (03)	Presentation/Discussion: Writing the Methods Section Presentation/Discussion: Preparing and Giving Poster Presentations Discussion: The Annotated Journal Articles
Fri, Feb 9	<ul> <li>Reading Due</li> <li>Chapter 27: How to Present a Paper Orally</li> <li>Chapter 15: How to Cite the References</li> <li>Discussion Post #3 Due</li> </ul>
Sun, Feb 11	Writing Due: draft of methods section

Mon, Feb 12 Presentation/Discussion: Giving Oral Presentations
 (04) Presentation/Discussion: Citing References—Some Basics



Workshop: Drafts of Methods Sections

### Fri, Feb 16 Reading Due

- Chapter 12: How to Write the Results
- Chapter 16: How to Design Effective Tables
- Chapter 17: How to Prepare Effective Graphs
- Chapter 18: How to Prepare Effective Photographs
- Chapter 19: Rights and Permissions
- Readings from the Clinical Chemistry Guide to Scientific Writing (<u>https://academic.oup.com/clinchem/pages/guide-to-scientific-writing</u>):
  - Part 7. Put Your Best Figure Forward: Line Graphs and Scattergrams
  - o Part 8. Bars and Pies Make Better Desserts Than Figures
  - Part 9. Bring Your Best to the Table

#### Discussion Post #4 Due

Note: This post is to include some tables, figures, or both that you might be able to use as models.

- Sun, Feb 18 Writing Due: revised version of informal abstract
- Mon, Feb 19Presentation/Discussion: Writing the Results Section(05)Presentation/Discussion: Tables and FiguresWorkshop: Examples of Results Sections and Tables and Figures

### Fri, Feb 23 Reading Due

- Chapter 7: How to Prepare the Title
- Chapter 8: How to List the Authors and Addresses
- Chapter 14: How to State the Acknowledgments
- Chapter 13: How to Write the Discussion

### Discussion Post #5 Due

Note: Feel free to include an example of a poster presenting research. The poster can be one that you or others have prepared. The design of the poster might then be discussed during the course.

- Sun, Feb 25 Writing Due: revised draft of methods section
- Mon, Feb 26Presentations by Some Class Members about Their Work(06)Presentation/Discussion: Titles and AuthorsExercise: ContributorshipsPresentation/Discussion: Writing the DiscussionWorkshop: Revised Drafts of Methods Sections; Progress on Results Sections

#### Fri, Mar 1 Reading Due

- Chapter 10: How to Write the Introduction
- Chapter 20: How to Submit the Manuscript
- Chapter 21: The Review Process (How to Deal with Editors)



- Chapter 22: The Publishing Process (How to Deal with Proofs)—and After Publication
   Discussion Post #6 Due
- Sun, Mar 3 Writing Due: draft of results section
- Mon, Mar 4Presentations by Some Class Members about Their Work(07)Presentation/Discussion: Writing the Introduction<br/>Presentation/Discussion: Publishing a Paper (may be continued in future weeks)<br/>Workshop: Drafts of Results Sections
- Fri, Mar 8
  Reading Due

  Chapter 5: Ethics in Scientific Publishing

  Optional Reading

  Chapter 1: What Is Scientific Writing?
  Chapter 2: Historical Perspectives
  Chapter 4: What Is a Scientific Paper?

Discussion Post #7 Due

- Spring Break \* Spring Break
- Sun, Mar 17 Writing Due: draft of discussion
- Mon, Mar 18Presentations by Some Class Members about Their Work(08)Presentation/Discussion: Writing the IntroductionPresentation/Discussion/Cases: Ethics in Scientific Publishing<br/>Workshop: Drafts of Discussions

#### Fri, Mar 22 Reading Due

- Chapter 30: Use and Misuse of English
- Chapter 31: Avoiding Jargon
- Chapter 32: How and When to Use Abbreviations
- Chapter 33: Writing Clearly Across Cultures and Media
- Appendix 2: Words and Expressions to Avoid

#### **Discussion Post #8 Due**

- Sun, Mar 24 Writing Due: draft of introduction
- Mon, Mar 25Presentations by Some Class Members about Their Work(09)Presentation/Discussion: Some Aspects of Writing Style<br/>Workshop: Drafts of Introductions

#### Fri, Mar 29 Reading Due

- Chapter 36: How to Prepare a Curriculum Vitae
- Chapter 26: How to Write for the Public
- Chapter 39: How to Work with the Media



### Discussion Post #9 Due

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Sun, Mar 31	<b>Writing Due:</b> revised draft of results section [Note: If you are observing Easter and therefore want to submit this assignment later, you may do so as later as Tuesday, April 2, without penalty.]
Mon, Apr 1 (10)	Presentations by Some Class Members About Their Work Presentation/Discussion: Presenting Science to the Public Presentation/Discussion: Preparing or Refining a Curriculum Vitae Workshop: Starting to Revise Your Curriculum Vitae or Resume
Fri, Apr 5	<ul> <li>Reading Due</li> <li>Chapter 37: How to Prepare Grant Proposals and Progress Reports</li> <li>"20 Tips for Grant Writing Success" (available at <a href="https://www.nifa.usda.gov/sites/default/files/2022-03/20TipsforGrantWritingSuccess_FactSheet.pdf">https://www.nifa.usda.gov/sites/default/files/2022-03/20TipsforGrantWritingSuccess_FactSheet.pdf</a>)</li> <li>Discussion Post #10 Due</li> </ul>
Sun, Apr 7	Writing Due: revised draft of discussion
Mon, Apr 8 (11)	This week, instead of class Monday, there will be one-to-one conferences with the instructor at mutually feasible times during the week. Class members can thus receive individualized feedback—and can watch the solar eclipse.
Fri, Apr 12	<ul> <li>Browsing Due         <ul> <li>annotated example of successful proposal, posted at <u>http://www.authoraid.info/en/resources/details/587/</u></li> <li>sample grant proposals posted at <u>https://www.niaid.nih.gov/grants-contracts/sample-applications</u></li> </ul> </li> <li>Discussion Post #11 Due</li> </ul>
Sun, Apr 14	Writing Due: revised draft of introduction
Mon, Apr 15 (12)	Presentations by Some Class Members about Their Work Presentation/Discussion: Preparing Grant Proposals and Progress Reports
Fri, Apr 19	<ul> <li>Reading Due <ul> <li>Chapter 23: How to Write a Review Paper</li> <li>Chapter 24: How to Write Opinion (Book Reviews, Editorials, and Letters to the Editor)</li> <li>Chapter 35: How to Write a Thesis</li> <li>Chapter 40: How to Provide Peer Review</li> </ul> </li> <li>Browsing Due: 3 review papers in your field <ul> <li>Instructions: Find and look at 3 review papers in your field. Attach them, or provide links to them. Be ready to discuss what you notice about them.</li> <li>Discussion Post #12 Due</li> </ul> </li> </ul>





Sun, Apr 21 Writing Due: a	abstract
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Mon, Apr 22 Presentation/Discussion: Writing Review Papers
 (13) Presentation/Discussion: Other Journal Submissions Other Than Scientific Papers
 Presentation/Discussion: Assorted Other Items
 Panel Discussion: Advice from Journal Editors and Peer Reviewers

#### Fri, Apr 26 Reading Due

- Chapter 25: How to Write a Book Chapter or a Book
- Chapter 41: How to Edit Your Own Work
- if desired, other chapters not yet read
- Appendix 4: Some Helpful Websites
- "Beating the Odds for Journal Acceptance" by Warren S. Warren (*Science Advances*, 27 July 2022, available at https://www.science.org/doi/10.1126/sciadv.add9147)

**Discussion Post #13 Due** Note: This post is to include a list of items you still need to do before submitting your completed paper.

- Mon, Apr 29 Presentation/ Discussion: Writing Book Chapters and Books
- Presentation/Discussion: Resources for Continuing to Develop Your Professional Communication Skill
   Presentation/Discussion: Editing Your Own Work
   Workshop: Looking Ahead—Completing and Submitting the Current Paper, Continuing to Develop Your Writing Skill, Continuing to Write, and Sharing Your Learning from This Course with Others

Fri, May 3 Writing Due: entire paper

Note: You are encouraged to submit your paper earlier, but you can have until now if needed.

Thank You!

# **University Policies**

### **Attendance Policy**

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to <u>Student Rule 7</u> in its entirety for information about excused absences, including definitions, and related documentation and timelines.



# Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to <u>Student Rule 7</u> in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" (<u>Student Rule 7, Section 7.4.1</u>).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" (<u>Student Rule 7, Section 7.4.2</u>).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See <u>Student Rule 24</u>.)

# Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" (Section 20.1.2.3, Student Rule 20).

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at <u>aggiehonor.tamu.edu</u>.

# Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact the Disability Resources office on your campus (resources listed below) Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Disability Resources is located in the Student Services Building or at (979) 845-1637 or visit <u>disability.tamu.edu</u>.



# Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see <u>University Rule 08.01.01.M1</u>):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, a person who is subjected to the alleged conduct will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Students wishing to discuss concerns related to mental and/or physical health in a confidential setting are encouraged to make an appointment with <u>University Health Services</u> or download the <u>TELUS Health</u> <u>Student Support app</u> for 24/7 access to professional counseling in multiple languages. Walk-in services for urgent, non-emergency needs are available during normal business hours at University Health Services locations; call 979.458.4584 for details.

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's <u>Title IX webpage</u>.

# Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors influencing a student's academic success and overall wellbeing. Students are encouraged to engage in healthy self-care practices by utilizing the resources and services available through <u>University Health Services</u>. Students needing a listening ear can call the Texas A&M Helpline (979.845.2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends for mental health peer support while classes are in session. The <u>TELUS Health Student Support app</u> provides access to professional counseling in multiple languages anytime, anywhere by phone or chat, and the 988 Suicide & Crisis Lifeline offers 24-hour emergency support at 988 or <u>988lifeline.org</u>.

Students needing a listening ear can contact University Health Services (979.458.4584) or call the Texas A&M Helpline (979.845.2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends while





classes are in session. 24-hour emergency help is also available through the 988 Suicide & Crisis Lifeline (988) or at <u>988lifeline.org</u>.

# University Writing Center

The University Writing Center (UWC) has trained peer consultants available to work with you on any kind of writing or speaking project, including research papers, lab reports, application essays, or creative writing, and at any stage of your process, whether you're deciding on a topic or reviewing your final draft. You can also get help with public speaking, presentations, and group projects. We can work with you in person at our Evans or BLCC locations or via Zoom or email. To schedule an appointment or to view our handouts, videos, or interactive learning modules, visit <u>writingcenter.tamu.edu</u>. If you have questions, need help making an appointment, or encounter difficulty accessing our services, call 979-458-1455 or email <u>uwc@tamu.edu</u>.