

## **Scientific Writing**

NRM 5311

Spring 2025

### **Instructor:**

Dr. Rob Kinucan

RAS 109

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Lecture: MW 1:00-2:15, RAS 128

Office Hours: MW 9:00-11:00. I am also available by appointment.

### **Course Description:**

Welcome to Scientific Writing! My name is Dr. Rob Kinucan and I'll be working with you this semester to develop your scientific writing skills. For most of us, writing is an intimidating and stressful endeavor, but a skill that can be honed with practice and effort. Strong writing skills will serve you well throughout your career. As noted by Dr. Steve Heard, the author of your text, "Writing craft takes years to master and is never perfected." This is a workshop and project-oriented course that borrows heavily from his textbook and teachings. For best success, you must have a research project (thesis or proposal) developed enough to include in course activities and to share drafts with classmates. If not, this will be an opportunity to draft proposal elements to use for assignments. This course focuses on writing approaches and structure, not on subject specific information, grammar, etc. Those are important issues you address with your advisory committee. In this class you will cultivate techniques to write with a deliberate focus on behaviors as well as develop an appreciation for simple and clear writing.

### **Required Textbook:**

S. B. Heard. 2022. *The Scientist's Guide to Writing: How to Write More Easily and Effectively Throughout Your Scientific Career*. Second Edition. Princeton University Press.

### **Required Supplies:**

For several Workshop Exercises you will need various colored highlighters (W8, W10, W19) using yellow, orange, blue, green, and pink. If you don't have highlighters, you can find a creative way to identify different sections (for example, red, blue, and black underlines, and yellow highlighting).

### **Course Student Learning Outcomes:**

Students are expected to develop the following knowledge throughout the course.

- State why scientists write in specific styles.
- Identify your goals as a scientific writer.
- Manage yourself as a writer to reach those goals.
- Be able to integrate the knowledge of writing style, structure, content, and behavior to effectively write a scientific manuscript.

### **Marketable Skills:**

Students are expected to develop the following general marketable skills throughout the course.

- Communication: Students will gain effective written communication skills through workshop discussions and written assignments.
- Critical thinking: Students will practice critical thinking in writing analysis, workshop participation and products, and assignments.

### **Program Student Learning Outcomes:**

The graduating student will be able to demonstrate that he/she is able to:

- Apply statistical concepts and procedures to natural resource data.
- Evaluate literature and references as they apply to the natural resource field.
- Demonstrate knowledge of fundamental and advanced concepts of range and wildlife management.

### **ADA Statement:**

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Counseling and Accessibility Services, Ferguson Hall, Room 112; Mailing address: P.O. Box C-122, Sul Ross State University, Alpine, Texas; Telephone: 432-837-8203; More resources can be found at: <https://www.sulross.edu/counseling-and-accessibility-services/>

### **Academic Integrity:**

Students are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is punctual, prepared, courteous, focused and demonstrates meaningful and relevant participation. Examples of academic dishonesty include but are not limited to turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

### **Assignment Submission Makeup Policy:**

Turn work in on time! If you have a specific circumstance that prevents you from submitting an assignment on time, reach out as soon as possible. Assignments are due at the beginning of class on the due date. Late assignments will be penalized at the discretion of the instructor.

### **Grades:**

Your final grade will consist of:

60% assignments (7)

20% workshop products (19)

20% workshop participation (19)

Grade assignments: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; <60 = F

### **Connecting with Students for Success:**



This spring we will participate in the Connecting with Students for Success program at Sul Ross. Research has demonstrated that building connections between students and faculty fosters a strong learning environment and better overall success. As part of the program, I will meet individually with

each of you, and we will schedule meetings soon. You will also receive a survey from institutional research to complete beginning March 24 and closing on April 4.

<b>Date</b> White=Mon Gray=Wed	<b>Lecture</b>	<b>Workshop</b>	<b>Reading*</b>	<b>Assignments</b> (Yellow=new assignment; Red=due date)
Jan 15	L1: Intro, set up peer groups Part I: What is writing?	W1: Peer groups get-to-know-you		
Jan 22	L2: Papers as stories	W2: Outlining 3 ways	Ch 1, 2, 7	Begin A1 – Story summary
Jan 27	L3: Writing strategy	W3: Tip sheets	Ch 4, 5, 6	A1 due
Jan 29	L4: Paper structure	W4: Finding IMRaD	Ch 8, 16	
Feb 3	L5: Methods	W5: Methods detail	Ch 11; pp 174-176	Begin A2 – Methods draft
Feb 5	L6: Figures and tables	W6: Figure/Table draft	Ch 12	
Feb 10	<i>SRM meeting</i>			
Feb 12	<i>SRM meeting</i>			
Feb 17	L7: Results	W7: Results critique		A2 due Begin A3 – Results draft
Feb 19	L8: Introduction	W8: Introduction markup	Ch 10	
Feb 24	L9: Reference management and citation searching. (Guest lecture – Betsy Helesic)	W9: Reference management		A3 due
Feb 26	L10: Discussion	W10: Discussion markup	Ch 13	Begin A4 – Introduction draft
Mar 3	L11: Paragraphs	W11: Paragraph markup	Ch 17	
Mar 5	L12: Peer review	W12: Methods/Results peer comments	Ch 23; pp 267-269	Begin A5 – Introduction peer review
Mar 10	Editorial markup	CSE handout		A4 due
Mar 12	L13: Deep reading and writing (Guest Lecture – Mike Fernandez)	W13: Deep reading	Ch 28	Begin A6 – Discussion draft A5 due
Mar 17	<i>Spring Break</i>			
Mar 19	<i>Spring Break</i>			
Mar 24	L14: Title and Abstract	W14: Titles	Ch 9	
Mar 26	L15: Revision	<i>None</i>	Ch 21, 22	
Mar 31	L16: Response to reviews	W15: Response to reviews	Ch 24	Begin A7 – Complete paper draft and response to reviews
Apr 2	L17: Brevity	W16: Bloat and cut	Ch 20	A6 due
Apr 7	L18: Citation practices	<i>None</i>	Ch 15	
Apr 9	L19: Co-authorship	<i>None</i>	Ch 27	
Apr 11	<i>Attend/Participate Symposium on Friday April 11</i>	<i>None</i>		

Apr 14	<i>Attended/Participated in Research Symposium on April 11</i>	<i>None</i>		
Apr 16	L20: Journal choice	W17: Evaluating journals		A7 due
Apr 21	L21: Outreach: ( <i>Guest lecture- Dr. Tom Shiller</i> )	W18: Blog critique		
Apr 23	L22: Thesis Formats ( <i>Guest lecture – Dr. Justin French</i> )	<i>None</i>		
Apr 28	L23 Thesis submission & processes ( <i>Guest lecture – Marilyn McGhee</i> )	<i>None</i>		
Apr 30	L24: Why scientific writing is a challenge L25: Beauty and humor	W19: Jargon	Ch 30	
*All readings from the <i>Scientist's Guide to Writing, 2<sup>nd</sup> edition</i>				