Scientific Writing
NRM 5311
Spring 2026

Instructor:
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RAS 109
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Lecture: MW 2:00-3:15, RAS 129
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, your 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 RossState 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.

Student Responsibilities Statement
All full-time and part-time students are responsible for familiarizing themselves with the Student Handbook and the Undergraduate & Graduate Catalog and for abiding by the University rules and regulations. Additionally, students are responsible for checking their Sul Ross email as an official form of communication from the university. Every student is expected to obey all federal, state and local laws and is expected to familiarize themselves with the requirements of such laws.

AI Statement

The University does not recommend or endorse any specific AI tools or resources. Students should be aware that many generative AI tools (e.g., ChatGPT, Google Gemini, Microsoft Copilot) store user input and may use this data to train future models. For this reason, students should never upload or share personal, confidential, or identifiable information—such as names, ID numbers, health data, or assignment submissions containing such details—into any generative AI platform. When using AI tools, students should verify whether the tool complies with student privacy standards as indicated by the University. Faculty may recommend specific tools that better align with institutional data privacy policies, but ultimate responsibility for data protection rests with users. Students are encouraged to use faculty-recommended platforms when engaging in coursework involving generative AI. The University is not liable for any adverse experience or impact when students interact with these tools.

Generative AI is permitted in specific contexts and with acknowledgment. The emergence of generative AI tools (such as ChatGPT and DALL-E) has sparked interest among many students in our discipline. The use of these tools for brainstorming ideas, exploring possible responses to questions or problems, and creative engagement with the materials may be useful for you as you craft responses to class assignments. While there is no substitute for working directly with your instructor, the potential for generative AI tools to provide automatic feedback, assistive technology and language assistance is

clearly developing. Please feel free to reach out to me well in advance of the due date of assignments for which you may be using generative AI tools, and I will be happy to discuss what is acceptable.
In this course, students shall give credit to AI tools whenever used, even if only to generate ideas rather than usable text or illustrations. When using AI tools on assignments, add an appendix showing (a) the entire exchange, highlighting the most relevant sections; (b) a description of precisely which AI tools were used (e.g. ChatGPT private subscription version or DALL-E free version), (c) an explanation of how the AI tools were used (e.g. to generate ideas, turns of phrase, elements of text, long stretches of text, lines of argument, pieces of evidence, maps of the conceptual territory, illustrations of key concepts, etc.); (d) an account of why AI tools were used (e.g. to save time, to surmount writer's block, to stimulate thinking, to handle mounting stress, to clarify prose, to translate text, to experiment for fun, etc.). Students shall not use AI tools during in-class examinations, or assignments unless explicitly permitted and instructed. Overall, AI tools should be used wisely and reflectively with an aim to deepen understanding of subject matter.

It is a violation of university policy to misrepresent work that you submit or exchange with your instructor by characterizing it as your own, such as submitting responses to assignments that do not acknowledge the use of generative AI tools. Please feel free to reach out to me with any questions you may have about the use of generative AI tools before submitting any content that has been substantially informed by these tools.

In this course, we may use generative AI tools (such as ChatGPT) to examine the ways in which these kinds of tools may inform our exploration of the topics of the class. You will be informed as to when and how these tools will be used, along with guidance for attribution if/as needed. Any use of generative AI tools outside of these parameters constitutes plagiarism and will be treated as such.
Understanding how and when to use generative AI tools (such as ChatGPT, DALL-E) is quickly emerging as an important skill for future professions. To that end, you are welcome to use generative AI tools in this class if it aligns with the learning outcomes or goals associated with assignments. You are fully responsible for the information you submit based on a generative AI query (such that it does not violate academic honesty standards, intellectual property laws, or standards of non-public research you are conducting through coursework). Your use of generative AI tools must be properly documented and cited for any work submitted in this course.

To ensure all students have an equal opportunity to succeed and to preserve the integrity of the course, students are not permitted to submit text that is generated by artificial intelligence (AI) systems such as ChatGPT, Bing Chat, Claude, Google Bard, or any other automated assistance for any classwork or assessments. This includes using AI to generate answers to assignments, exams, or projects, or using AI to complete any other course-related tasks. Using AI in this way undermines your ability to develop critical thinking, writing, or research skills that are essential for this course and your academic success. Students may use AI as part of their research and preparation for assignments, or as a text editor, but text that is submitted must be written by the student. For example, students may use AI to generate ideas, questions, or summaries that they then revise, expand, or cite properly. Students should also be aware of the potential benefits and limitations of using AI as a tool for learning and research. AI systems can provide helpful information or suggestions, but they are not always reliable or accurate. Students should critically evaluate the sources, methods, and outputs of AI systems. Violations of this policy will be treated as academic misconduct. If you have any questions about this policy or if you are unsure whether a particular use of AI is acceptable, please do not hesitate to ask for clarification.

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 only be accepted under extenuating circumstances, and at my discretion. If an assignment is accepted late, a point penalty may be assessed, again at my discretion.

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

Date White=Mon Gray=Wed	**Lecture**	**Workshop**	**Reading***	**Assignments** (Yellow=new assignment; Red=due date)
Jan 14	L1: Intro, set up peer groups Part I: What is writing?	W1: Peer groups get-to-know-you		
Jan 21	L2: Papers as stories	W2: Outlining 3 ways	Ch 1, 2, 7	Begin A1 – Story summary
Jan 26	L3: Writing strategy	W3: Tip sheets	Ch 4, 5, 6	A1 due
Jan 28	L4: Paper structure	W4: Finding IMRaD	Ch 8, 16	
Feb 2	L5: Methods	W5: Methods detail	Ch 11; pp 174-176	Begin A2 – Methods draft
Feb 4	L6: Figures and tables	W6: Figure/Table draft	Ch 12	
Feb 9	*SRM meeting*			
Feb 11	L7: Results	W7: Results critique		Begin A3 – Results draft
Feb 16	L8: Introduction	W8: Introduction markup	Ch 10	A2 due
Feb 18	TCTWS			
Feb 23	L9: Reference management and citation searching. *(Guest lecture – Betsy Helesic)*	W9: Reference management		A3 due
Feb 25	L10: Discussion	W10: Discussion markup	Ch 13	Begin A4 – Introduction draft
Mar 2	L11: Paragraphs	W11: Paragraph markup	Ch 17	
Mar 4	L12: Peer review	W12: Methods/Results peer comments	Ch 23; pp 267-269	Begin A5 – Introduction peer review
Mar 9	*Spring Break*			
Mar 11	*Spring Break*			
Mar 16	Editorial markup	CSE handout		A4 due
Mar 18	*L13:* Deep reading and writing *(Guest Lecture – Mike Fernandez)*	W13: Deep reading	Ch 28	Begin A6 – Discussion draft A5 due
Mar 23	L14: Title and Abstract	W14: Titles	Ch 9	
Mar 25	L15: Revision	*None*	Ch 21, 22	
Mar 30	L16: Response to reviews	W15: Response to reviews	Ch 24	Begin A7 – Complete paper draft and response to reviews
Apr 1	L17: Brevity	W16: Bloat and cut	Ch 20	A6 due
Apr 6	L18: Citation practices	*None*	Ch 15	
Apr 8	L19: Co-authorship	*None*	Ch 27	
Apr 10	*Attend/Participate Symposium on **Friday April 11***	*None*		

Apr 13	*Attended/Participated in Research Symposium on April 11*	*None*		
Apr 15	L20: Journal choice	W17: Evaluating journals		A7 due
Apr 20	L21: Outreach: *(Guest lecture- Dr. Tom Shiller)*	W18: Blog critique		
Apr 22	L22: Thesis Formats *(Guest lecture – Dr. Justin French)*	*None*		
Apr 27	L23 Thesis submission & processes (*Guest lecture – Marilyn McGhee)*	*None*		
Apr 29	L24: Why scientific writing is a challenge L25: Beauty and humor	W19: Jargon	Ch 30	
*All readings from the *Scientist's Guide to Writing, 2nd edition*				