

Scientific Writing
BSPM/SOCR 530, 1 credit, Spring 2018
Wednesdays 1 PM, E005 Plant Sciences

Instructors:

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Student Learning Objective: Students will develop the skills necessary to prepare a complete scientific journal article based on findings from their individual research project. Students will learn how to write manuscripts that not only present and interpret their findings, but also tell a compelling story. The writing approaches advocated in this class are applicable to anyone writing in the life sciences including, but not limited to, students in the Colleges of Agricultural Sciences, Natural Resources, and Natural Sciences. Students will gain experience in writing, editing, and literature assessment through regular feedback provided by the instructors as well as their peers.

Grading: Grading will be S/U (satisfactory/unsatisfactory) for all students in the class. A satisfactory grade will be earned if the student: (1) turns in each of the weekly assignments, (2) edits and comments on fellow students' writing assignments and actively participates in discussions, and (3) edits and turns in a completed manuscript suitable for a journal, containing all the following components (title, abstract, introduction, methods, results, tables, figures, discussion, literature cited). Students that are late on three assignment deadlines will receive a 'U' for the class.

Student Enrollment: Maximum enrollment is 16 (4 per instructor) and the minimum will be 8 students.

Course Material: All handouts will be available on Canvas. Please have access to the appropriate handout in class. An excellent resource is "**Writing Science: how to write papers that get cited and proposals that get funded**" by Joshua Schimel (accessible as an ebook through CSU Libraries) (<http://www.amazon.com/Writing-Science-Papers-Proposals-Funded/dp/0199760241>). Chapters 1-3 are particularly relevant!

Assignments: All assignments should be submitted electronically as a Word file to the instructor and the other students in your group via-email **by Sunday evening prior to Wednesday's class**. The instructor and student group members need two days to read them before the class meeting. All pages should be numbered and all text should be double spaced (to facilitate editing). Please use a standard font and size (e.g., Times New Roman – 12 pt., Calibri – 11 or 12 pt.) **Important:** each student should engage the active participation of their advisor(s) in each assignment so the scientific quality of the writing is being edited by the advisor as we move through the assignments. The instructors will assume that each assignment will be edited by the student's advisor before the final completed manuscript is turned in.

Library & Research Help

The CSU Libraries Help Desk provides both research (970-491-1841) and technical (970-491-7276) support. Virtual assistance is also available via Libraries Ask Us! chat and e-mail services: <http://lib.colostate.edu/help/ask-us>. Renae Newhouse is the librarian supporting Agriculture and this course. Contact her for assistance at Renae.Newhouse@colostate.edu or (970) 491-5338.

CSU Writes

Another writing resource on campus is 'CSU Writes' (<https://csuwrites.colostate.edu/about/>), which aims to increase the writing productivity of CSU faculty and grad students. This initiative offers workshops, retreats, 'Show up and write' events, and more, all focused on improved writing.

Academic Integrity: A summary of the University's Academic Integrity Policy and Misconduct Procedures may be found at the following website: <http://facultycouncil.colostate.edu/faculty-manual-section-i/#1.5>

Submitting plagiarized work is a serious and, unfortunately, widespread issue. When detected by a journal, plagiarism often results in an automatic rejection by the journal editors and in egregious cases may result in a lifetime ban. Similarly, plagiarism will not be tolerated in this class.

Even if you think you know what plagiarism is, we encourage you to take the 'Plagiarism Self Test' on the TILT website: <http://tilt.colostate.edu/integrity/resources/quiz/index.cfm> for more information about what constitutes plagiarism.

Title IX: Sexual Assault, Sexual Violence, Sexual Harassment: CSU's Discrimination, Harassment, Sexual Harassment, Sexual Misconduct, Domestic Violence, Dating Violence, Stalking, and Retaliation policy designates faculty and employees of the University as "Responsible Employees." This designation is consistent with federal law and guidance, and requires faculty to report information regarding students who may have experienced any form of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation. This includes information shared with faculty in person, electronic communications, or in class assignments. As "Responsible Employees", faculty may refer students to campus resources (see below), together with informing the Office of Support and Safety Assessment to help ensure student safety and welfare. Information regarding sexual harassment, sexual misconduct, relationship violence, stalking and retaliation is treated with the greatest degree of confidentiality possible while also ensuring student and campus safety.

- Any student who may be the victim of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation is encouraged to report to CSU through one or more of the following resources:
 - Emergency Response 911
 - Deputy Title IX Coordinator/Office of Support and Safety Assessment (970) 491-1350
 - Colorado State University Police Department (non-emergency) (970) 491-6425

Visit: <http://oeo.colostate.edu/title-ix-sexual-assault> for more information.

Weekly Schedule

Date	Activity	Discussion Leaders
January 17	Course information and structure Science writing as story telling <u>Assignments:</u> 1. Contact your advisor regarding his/her obligations to help 2. Submit a description (three PowerPoint slides) of your research/manuscript (allowing us to place you in a small group) (due Jan. 21). You'll present this to the class next Wednesday (Jan. 24)	Pat Byrne Francesca Cotrufo
January 24	Ignite-style talks (3 minutes max) by students Assign groups	all students
January 31	Developing a logic structure (e.g., outline, graphical organizers) for your paper <u>Assignments:</u> 1. Prepare an outline/graphic organizer for your manuscript (due Feb. 4) 2. Choose a title and journal for your manuscript (due Feb. 4)	Paul Ode
February 7	Writing the Materials and Methods Section <u>Review:</u> outline/graphic organizer <u>Assignment:</u> write the first draft of Materials and Methods (due Feb. 11)	Pat Byrne
February 14	Writing the Results: Narrative, Tables, Figures <u>Review:</u> Materials and Methods <u>Assignment:</u> Prepare results narrative, tables, and figures (due Feb. 25)	Pankaj Trivedi
February 21	Continue presentation of 'Results: Narrative, Tables, Figures' if necessary finish review of 'Materials and Methods' if necessary	
February 28	Writing the Introduction <u>Review:</u> Results (narrative, tables, and figures) <u>Assignment:</u> Introduction and statement of objectives (due Mar. 19)	Francesca Cotrufo
March 7	Ethical Considerations Plagiarism, authorship, proprietary information, acknowledgements, etc.	everyone
March 14	SPRING RECESS	
March 21	Writing the Discussion and Conclusions <u>Review:</u> Introduction and statement of objectives <u>Assignment:</u> Discussion and Conclusions (due: Apr. 1, no joking)	Paul Ode
March 28	<u>Review:</u> Introduction (continued), Results if needed <u>Assignment:</u> None	

April 4	Abstract <u>Review</u> : Discussion and Conclusions <u>Assignment</u> : Abstract (due Apr. 15)	Pankaj Trivedi
April 11	The peer review process <u>Review</u> : Introduction (if needed) <u>Assignment</u> : none	Francesca Cotrufo
April 18	How to write a review; how to respond to reviewers Assignment: draft of complete manuscript with references (due Apr. 22)	TBD
April 25	Review: draft of complete manuscript with references Assignment: final draft of manuscript (due May 2)	
May 2	Guest Speaker: Jason Kosovski (College Ag. Sci. Director of Communications) – Communicating with the public Final draft of manuscript due	
May 9	Feedback/ discussion regarding the course in Room E 005.	