

NR 569 CONSERVATION COMMUNICATION FUNDAMENTALS

COURSE SYLLABUS

2023 INSTRUCTOR INFORMATION

Instructor: Jamie Dahl, PhD

Office: Available via Teams or can request a phone appointment

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COURSE PREREQUISITES AND COREQUISITES

None

COURSE DESCRIPTION AND OBJECTIVES

This course introduces students to communications for conservation and examines communications concepts and theories as they relate to conservation issues and professionals. Roles for communicators in conservation organizations are also examined. Behavior change theories and audience research and analysis, including the topic of diversity in conservation planning and management, are emphasized for achieving goals in conservation communications.

Upon completion of this course, you will be able to:

- Define and explain concepts, terms, and theories related to conservation communications
- Identify and examine rhetorical conceptions and discourses related to conservation management, policy, and science
- Define and discuss communications roles and responsibilities of conservation professionals and organizations
- Demonstrate clear and effective science writing practices and techniques including use of active voice and subject-driven sentences and minimal use of jargon and technical language
- Describe and interpret theories related to public motivations and behavior change related to conservation communications
- Define conservation psychology and its applications for communications for conservation
- Apply audience analysis and segmentation strategies to conservation outreach and communications scenarios
- Identify methods, goals, and benefits of quantitative and qualitative audience research and surveys for conservation programs
- Discuss and interpret diversity and changing demographic trends regarding intercultural communications for conservation audiences



REQUIRED TEXT

- Greene, Anne (2013), *Writing Science in Plain English*. Chicago: University of Chicago Press.

All other required and supplemental reading and other course materials are available via Canvas and eReserves.

OTHER REQUIRED AND SUPPLEMENTAL MATERIALS ***SEE CANVAS***

Module 1 (**all most up-to-date information will be in Canvas Modules)

- Pezzullo, P.C. and Cox, R. (2018) *Environmental Communication and the Public Sphere* (5th ed.). Thousand Oaks, CA: Sage Publications (Introduction: Speaking for/about the Environment, pp. 1-8; and Chapter 1, Defining Environmental Communication, pp. 11-27)
- Singh et al. (2014), A more social science: barriers and incentives for scientists engaging in policy. *Frontiers in Ecology and the Environment*, 12(3), 161–166
- Funk et al. (2015), *Public and Scientists' Views on Science and Society*. Washington, D.C.: Pew Research Center (Summary of Findings, pp. 5-20; and Chapter 4, AAAS Scientists' Views on the Scientific Enterprise, pp. 58-70)
- Colorado State University Center for Collaborative Conservation (2017), *Building Capacity for Collaborative Conservation, Findings from a Practitioner Needs Assessment of Critical Skills and Tools for Collaborative Conservation in the American West*.
- R. and Depoe, S. (2022). *Emergence and growth of the field of environmental communication*. Second Edition. *The Routledge Handbook of Environment and Communication*.
<https://www.taylorfrancis.com/chapters/edit/10.4324/9781003119234-3/emergence-growth-field-environmental-communication-robert-cox-stephen-depoe>
- Nie, Martin. (2008). *The Governance of Western Public Lands*. Lawrence, Kansas: University of Kansas Press. (Chapter 1, Why Is There So Much Conflict about Public Land and Resource Management, pp.11-43)
- Shah, A. and Parsons, E.C.M. (2018), Lower public concern for biodiversity than for wilderness, natural places, charismatic megafauna and/or habitats. *Environmental Communication*. Published online, 1-12. Retrieved from:
<https://www.tandfonline.com/doi/abs/10.1080/1533015X.2018.1434025>
- Gordon, J.C. and Berry, J.K. (2006), *Environmental Leadership Equals Essential Leadership*, New Haven, CT: Yale University Press (Chapter 4, Solving Environmental Problems: Long Times and Complexity, pp. 47-66; and Ch. 5, Solving Environmental Problems: Emotion, Values, Integration, and Focus, pp. 67-81)

Module 2

- Greene, A. (2013), *Writing Science in Plain English*. Chicago: University of Chicago Press
- Pezzullo, P.C. and Cox, R. (2018) *Environmental Communication and the Public Sphere* (5th ed.). Thousand Oaks, CA: Sage Publications (Ch. 2, Contested Meanings: A Brief History, pp. 29-48; Ch. 3, Symbolic Constructs of the Environment, pp. 51-65)



- Nash, R.F. (2014). *Wilderness and the American Mind* (5th ed.). New Haven: Yale University Press. (Chapter 3, "The Romantic Wilderness," pp. 44-66)
- Leopold, A. (1966), *A Sand County Almanac with Essays on Conservation from Round River*. New York: Ballantine Books. (Part IV, "The Land Ethic," pp. 237-264)
- Carson, R. (1962). *Silent Spring*. New York: Houghton Mifflin Company. (Chapter 1, "A Fable for Tomorrow," pp. 1-4)
- Wilkinson, C. (1992). *Crossing the Next Meridian*. Washington, D.C.: Island Press. (Chapter 1, "The Lords of Yesterday," pp. 3-27)
- Nijhuis, M. (2014), "Bridging the Conservation Divide." *The New Yorker*. Accessed 2019. <https://www.newyorker.com/tech/annals-of-technology/bridging-conservation-divide>
- Weigel, L. and Metz D. (2018), *Key Findings, the 2018 Survey of the Attitudes of Voters in Eight Western States, Colorado College State of the Rockies Project Conservation in the West Poll*. PDF: <https://www.coloradocollege.edu/other/stateoftherockies/conservationinthewest/past-results/2018.html>
- Video: "Colorado poll shows people know the importance of the outdoors," Denver Channel 7/ Politics Unplugged, February 11, 2018 [video interview with Lori Weigel, Public Opinion Strategies, and Alex Boian, Outdoor Industry Association]
- <https://www.thedenverchannel.com/news/politics-unplugged/colorado-poll-shows-people-know-the-importance-of-the-outdoors>
- Greider, T. and Garkovich, L. (1994), *Landscapes: The Social Construction of Nature and the Environment*. *Rural Sociology* 59 (1), 1-24
- Audio: National Conservation Training Center (2017), "The Nature of Americans: A Dive Into the Findings." NCTC Podcasts <http://digitalmedia.fws.gov/cdm/ref/collection/audio/id/146>
- St. Maurice, H. (2014), *On a Rhetorical Technique in Leopold's The Land Ethic: "That Imperial First Word."* *SAGE Open* October-December 2014, 1-6

Module 3

- Greene, A. (2013), *Writing Science in Plain English*. Chicago: University of Chicago Press
- "Write on, Biologists are using more informal language in their papers" (2016), *Nature* 539: 140
- Yong, E. (2010), "On jargon, and why it matters in science writing," *Discover*, National Geographic.
- Quirk, T. (2012) "Writers should not fear jargon," *Nature* 487: 407
- Makri, A. (2012) "Communication: Embrace complexity but not jargon," *Nature* 488: 591
- Plain Writing: Overview, and Federal Plain Writing Guidelines, Environmental Protection Agency <https://www.epa.gov/home/plain-writing>
- Plain Writing, Our Pledge to You, U.S. Department of Agriculture. <https://www.usda.gov/plain-writing>
- The Science Writers' Handbook website <https://www.nasw.org/pitch-publish-prosper-online-resources-science-writers-handbook>
- Dobbs, D. (2013) "David Dobbs on science writing: 'hunt down jargon and kill it,'" *The Guardian* <https://www.theguardian.com/science/2013/apr/19/science-writing-david-dobbs>



- Secrets of Good Science Writing, The Guardian
<https://www.theguardian.com/science/series/secrets-science-writing>

Module 4

- Clayton S. and Myers G. (2015) Conservation Psychology: Understanding and promoting human care for nature. London: John Wiley & Sons (Chapter 5, Attitudes, Values, and Perceptions, pp. 93-113)
- Stern, M.J. (2018), Social Science Theory for Environmental Sustainability: A Practical Guide. Oxford: Oxford University Press. (Chapter 2, Cognitive biases and limitations, pp. 9-18)
- Stern, M.J. (2018), Social Science Theory for Environmental Sustainability: A Practical Guide. Oxford: Oxford University Press. (Chapter 4, Theories of motivation, cognition, and reasoning, pp. 26-62)
- Ardoin, N. et al (2013) Influencing Conservation Action: What Research Says About Environmental Literacy, Behavior, and Conservation Results. New York, NY: National Audubon Society (pp.6-25)
- Video: Three Myths of Behavior Change – What You Think You Know That You Don't," Jeni Cross, Colorado State University, TEDxCSU, March 2013
Video link: <https://www.youtube.com/watch?v=l5d8GW6GdR0>
- Schultz, P.W. (2011), Conservation Means Behavior. Conservation Biology 25 (6), 1080-1083
- Kollmuss A. and Agyeman J. (2002), Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior. Environmental Education Research, 8 (3), 239-260

Module 5

- Clayton S. and Myers G. (2015), Conservation Psychology: Understanding and promoting human care for nature. London: John Wiley & Sons (Chapter 1, Introducing the Field of Conservation Psychology, pp. 1-14)
- Selinske, M. et al. (2018), Revisiting the promise of conservation psychology. Conservation Biology. 32 (6): 1464-1468.
- Video: Why Study Conservation Psychology? What it offers for practitioners and researchers," presented by Abigail Abrash Walton, Antioch University Conservation Psychology Institute webinar (first 16 minutes; can listen on for Q&A session too) <https://seedfield.antioch.edu/2017/study-conservation-psychology-webinar-series/>
- Stern, M.J. (2018), Social Science Theory for Environmental Sustainability: A Practical Guide. Oxford: Oxford University Press. (Chapter 6, Trust, negotiation, and public involvement, pp. 100-123)
- Manfredo et al (2017), Values, trust, and cultural backlash in conservation governance: The case of wildlife management in the United States. Biological Conservation 214 (2017), 303-311
- [Antioch University Conservation Psychology Institute website](#) (lots of good additional resources and webinars)
- Video: "Practical Strategies for Coping with the Emotional Toll of Conservation Work," presented by Thomas Doherty, Antioch University Conservation Psychology Institute webinar series <https://www.antioch.edu/event/webinar-practical-strategies-for-coping-with-the-emotional-toll-of-conservation-work/>



- Bennett et al. (2016) Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation* 205 (2017) 93-108

Module 6

- Jurin et al. (2010), *Environmental Communication, Skills and Principles for Natural Resource Managers, Scientists, and Engineers* (2nd ed.). New York, NY: Springer (Ch. 6, Analyzing Your Audience, pp. 83-90)
- Hine et al. (2017), Audience Segmentation and Climate Change Communication Oxford Research Encyclopedia of Climate Science. New York: Oxford University Press, 1-18
- Kanagavel, A. et al. (2014), Beyond the “General Public”: Implications of Audience Characteristics for Promoting Species Conservation in the Western Ghats Hotspot, India. *Ambio* 43, 138-148
- Gorham, L. et al. (2014), The Critical Target Audience: Communicating Water Conservation Behaviors to Critical Thinking Styles. *Journal of Applied Communications* 98 (4), 42-55
- Global Warming’s Six Americas, Yale Program on Climate Change Communication
<http://climatecommunication.yale.edu/about/projects/global-warmings-six-americas>

Module 7

- Jurin et al. (2010) *Environmental Communication: Skills and Principles for Natural Resource Managers, Scientists, and Engineers* (2nd edition). Springer. (Ch. 12, Communicating Across Cultures, pp. 189-203)
- Jones, M.S. and J. Solomon (2019), Challenges and supports for women conservation leaders. *Conservation Science and Practice*: 1-11.
- Finney, Carolyn (2014), *Black Faces, White Spaces*. Chapel Hill, NC: University of North Carolina Press. (Introduction, pp. 1-10; Ch. 1, Bamboozled, pp. 21-31; Ch. 5, It's Not Easy Being Green, pp. 92-115)
- Taylor, Dorceta E. (2014) The State of Diversity in Environmental Organizations. *Green 2.0* (pp. 2-7, 172-175)
- Larmer, Paul (2013) Taking the park to the people. High Country News. Retrieved from <https://www.hcn.org/articles/taking-the-park-to-the-people>
- McCown et al. (2011) “Beyond Outreach Handbook: A Guide to Designing Effective Programs to Engage Diverse Communities.” Woodstock, VT: National Park Service Conservation Study Institute
- Winter et al. (2008) Routes to Communicating About Outdoor Recreation With Diverse Publics: What We Know About Media. Chavez et al. (Eds.) *Recreation visitor research: studies of diversity* Gen. Tech. Rep. PSW-GTR-210 (Chapter 16, pp. 195-204). Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station
- Pezzullo, P.C. and Cox, R. (2018) *Environmental Communication and the Public Sphere* (5th ed.). Thousand Oaks, CA: Sage Publications (Ch. 11, Environmental Justice and Climate Justice Movements, pp. 257-282)
- Pyramid Communications (2005), “Building Relationships with Communities of Color.” The Nature Conservancy



- Center for Western Priorities (2018), “The Next 100 Coalition.” Go West, Young Podcast <http://westernpriorities.org/2018/04/10/the-next-100-coalition/>
- Video: Cross-cultural communication and miscommunication about environmental conservation in Africa: A Conversation with Stephanie Hanes, Yale Program on Climate Communication <http://climatecommunication.yale.edu/news-events/cross-cultural-communication-miscommunication-environmental-conservation-africa-conversation-stephanie-hanes-award-winning-journalist/> Watch video (0:00-30:00)
- Video: Indigenous knowledge systems and communities, Dominique David-Chavez, Diversity and Inclusion in Conservation seminar series, Colorado State University Department of Human Dimensions of Natural Resources [Diversity and Inclusion in Conservation: Dominique M. David-Chavez, Colorado State University](#)

Module 8

- Newing et al. (2011), Conducting Research in Conservation, Social science methods and practice. New York: Routledge (Ch.3, Developing the methodology, pp. 43-64; Ch. 6, Qualitative interviews and focus groups, pp. 98-111)
- Newing et al. (2011), Conducting Research in Conservation, Social science methods and practice. New York: Routledge (Ch. 7, Questionnaires, pp. 119-145)
- Playa Lakes Joint Venture (2014), Landowner Focus Groups. https://www.pljv.org/docs/2013_PLJV_RWBJV_landowner_focus_group_report.pdf
- Derrick, Christina (2018), Using Focus Group Discussions in Conservation Research, British Ecological Society Methods.blog. Accessed 2019. <https://methodsblog.com/2018/03/19/focus-group-discussions/>



PARTICIPATION EXPECTATIONS

This is a 2-credit course taught over an 8-week period. To get the most out of this course, it is recommended that you devote 6-8 hours a week to do the weekly readings, read/listen/watch presentations, contribute to discussion forums, and complete your assessments. The recommended break-down of your time is as follows:

- 3 hours a week – weekly readings and taking notes
- 2 hours a week – reading/listening to presentations and taking notes
- 3 hours a week – contributing to discussion forums/completing assessments

This is a graduate level course that examines a range of fundamental concepts and practices for communications for conservation management, with an emphasis on audience analysis and research. There are high expectations regarding the quality of the work presented and the meeting of assessment deadlines. It will also be necessary to take the time to allow for critical thinking and analysis of concepts and issues presented in order to obtain a high grade.

COURSE PRESENTATION AND PROCEDURES

Content for this course is organized into eight weekly modules. Each module is divided up into a number of parts. Within each part, a combination of readings, narrated Powerpoint presentations, video presentations and podcasts with conservation communications professionals and managers, and graded assignments are provided. Each of these activities are organized in sequential order and should be completed as such. Discussion prompts are also scattered throughout the module to help stimulate thinking. Make sure all assigned tasks and readings are completed before moving on to the next module.

SUGGESTED STUDY METHODS

Online education requires skills and habits that may be less essential in traditional courses. In order to be successful in your online course you will need:

- **Space**—Establish a comfortable and well-organized physical workplace.
- **Time management skills**—Set personal study and "classroom" time as you would do for a traditional course.
- **Organization skills**—Print out all class material (modules, PowerPoints, assignments, additional resources, and any work you generate) and keep everything in a single location. Maintain electronic backups of all class materials.
- **Communication skills**—Demonstrate a willingness to interact with your instructor and classmates through email, phone calls, discussion boards, and active participation in all class activities.
- **Initiative**—Seek help from your instructor and classmates, ask questions as they arise.
- **Discipline**—Pace yourself, complete all activities and assignments before the due date, follow through on all class requirements to completion.



The more closely you adhere to the recommendations above the greater your chances of having a successful semester and a rewarding online experience.

GRADING

As a student enrolled in this course, one of your responsibilities is to submit course work by the due dates listed in the course schedule. Grading of the weekly discussion posts and comments, and other class activities and assignments will be provided within one week of the due date. If, however, due to unforeseeable circumstances, the grading of your work takes longer than one week, I will keep you informed of my progress and make every effort to return your work with feedback as soon as I can.

ASSIGNMENT*	GRADE POINTS	GRADE PERCENTAGE
Discussion posts and comments (4 @ 30 points each)	120	20
Activity: Conservation Policy & Constructs Wiki	60	10
Activity: Greene writing exercises	60	10
Activity: Conservation Writing & Readability	90	15
Activity: Conservation Communications Job Profile	120	20
Activity: Audience Analysis	150	25
Total:	600	100 %

*Keep a copy of all work created for the course, including work submitted through Canvas.

GRADE DESCRIPTION

A+	96.67-100%
A	93.33-96.67%
A-	90-93.33%
B+	86.67-90%
B	83.33-86.67%

B-	80-83.33%
C+	76.67-80%
C	70-76.67%
D	60-70%
F	0-60%

CANVAS INFORMATION & TECHNICAL SUPPORT

Canvas is where course content, grades, and communication will reside for this course.

- [Login for Canvas](#)
- [Canvas Support](#)
- For passwords or any other computer-related technical support, contact the [Central IT Technical Support Help Desk](#).
 - (970) 491-7276
 - help@colostate.edu

The [Technical Requirements](#) page identifies the browsers, operating systems, and plugins that work best with Canvas. If you are new to Canvas quickly review [the Canvas Student Orientation](#) materials.



ASSIGNMENT DETAILS (OVERVIEW)

*****SEE CANVAS*****

(*all of the most up-to-date information will be in Canvas Modules***)**

DISCUSSION EXERCISE: DISCUSSION POSTS AND COMMENTS (4X30 POINTS EACH)

Students will be expected to post a short, written reflexive/synthesis report, as assigned on the relevant weeks. This is based on one of the discussion prompts provided throughout the weekly content. This discussion should be posted to your group's Canvas discussion forum. It can be posted directly onto Canvas or attached as a MS Word Document that is no more than 1 page double-spaced. If referencing from the weekly readings and other sources, correct APA style is expected. There will be a total of 5 discussion exercises (DE), with each (discussions and comments) worth 30 points.

Each discussion exercise (DE) is made up of two sections: a post and two comments. Each post is to be posted on the discussion group thread by **Thursday 11:59pm (MST) of each week**, as listed in the course schedule. Students will then be expected to review and comment on a minimum of two DE posts from other students for the week. Students will have until **Sunday 11:59pm of the same week** to post their comments. These comments should be posted directly to Canvas. A portion of the marks for your discussion exercise will depend on the quality of the writing, so be sure to proofread for errors in grammar and spelling prior to submission. Points will also be subtracted for late submissions. To understand how the marking is undertaken for each DE, please refer to the marking rubric.

NR 569 marking rubric for weekly discussion exercises

Levels of Achievement			
Criteria	Exemplary	Proficient	Below Expectations
Promptness and Initiative	6 Points Posts original contribution, responds to at least two peers postings, within the required timeframe.	3 Points A discussion is posted but the student does not meet the requirement of commenting on two peer postings.	0 Points No discussion is posted at all.
Mechanics of Writing	6 Points Submissions are grammatically correct, posts with rare misspellings, format is clear and logical/professional delivery	3 Points Few errors in spelling and grammar, yet overall format is clear and logical.	0 Points Poor spelling and grammar in posts; the format of the discussion is difficult to follow and would be deemed as unprofessional by



			common business standards.
Relevance of Post	6 Points Post is highly related to assigned topics; cites at least one but preferably several credible references related to topic (text, website, or other credible / scholarly references); expresses opinions and ideas in a clear and concise manner with obvious connection to topic.	3 Points Discussion post is short in length and offers no further insight into the topic; opinions and ideas are stated clearly but occasionally there is a lack of connection to topic, and/or provides limited citations (from text, website, etc) for the community to reference.	0 Points Posts do not relate to the discussion; arguments made are not backed up by a reference; rehashes or summarizes other postings; unclear connection to topic; minimal expression of opinions or ideas.
Creating Community	6 Points Frequently attempts to motivate the group discussion; presents creative approaches to topic, can differ or counter peers points with diplomacy, if applicable. Refers to peer contributions. Creates community in the discussion.	3 Points Displays an effort to become involved with group; interacts with others and acknowledges posts of others.	0 Points Argumentative or abrasive. No peer interaction.
Critical Thinking/Analysis	6 Points Interprets topic in accurate and insightful ways. Uses information thoughtfully, in a ways that are factually relevant and accurate; postings shows analysis, might offer alternatives or creative viewpoints based on concrete evidence.	3 Points Accurately interprets topic; uses main points of information from resources/ references; may repeat the ideas of other but attempts to offer new insight; response does not provoke significant new thinking or further discussion.	0 Points Makes errors in interpreting topics; opinion-based comments only, with no support from the literature; superficial commentary.



ACTIVITY: CONSERVATION POLICY WIKI (60 POINTS)

For this week's activity, class members will contribute to a Conservation Policy wiki (as discussion board) that will both serve as a compendium of U.S. and international conservation and environmental laws and policies and be an exercise in discourses, rhetoric and constructs. This assignment is meant to familiarize our class with an array of conservation laws and also serves an opportunity to draft clear, concise, and creative written and visual messages and text.

Each student will be assigned a set of conservation/environmental laws or policies (see Canvas). For each law, you will share:

- a) Two six-word "messages" - one should explain the law or rule (does not need to be a complete sentence) and the other should help "sell" or advocate for the policy
- b) Two 100-150-word explanations of the what, when, and why for each law or policy - each using one of the environmental discourses presented through the video lecture and readings (i.e., utilitarianism; romanticism; anthropocene, etc.) Clearly identify the discourse used for each one. Information may include key advocates and opponents; origin and authorization dates, and details about incentives or penalties; enforcement; outcomes and results, etc.
- c) Two images (no text or caption) that "show" the law as framed by the discourses you used above. (Insert jpeg into spreadsheet and size to fit within column space.)

This activity is due in Module 2, Friday, by midnight (MST).

NR 569 marking rubric: Conservation Policy Wiki

Levels of Achievement			
Criteria	Exemplary	Proficient	Below Expectations
Six-word messages	10 Points Messages for both policies; appropriate length, clarity, creativity	8 Points Messages for both policies; too long or short; partially lacking clarity	0 Points Not messages for both policies
Images (one for each)	10 Points Images for both laws, demonstrate creativity	8 Points Images for both policies but lack clear connections to laws	0 Points Not images for policies
Short explanations using environmental discourse (Two for each)	40 Points Explanations identify discourse category and uses rhetoric, language supporting discourse. Include clear description and key details	32 Points Two explanations for policies with selected discourse categories but lacking supporting rhetoric or a few key details; inappropriate length	0 Points Not explanations for policies



ACTIVITY: GREENE WRITING EXERCISES (60 POINTS)

To demonstrate your comprehension and familiarity with important writing skills and practices for science communications, as shared in Anne Greene's *Writing Science in Plain English*, complete the following exercises from the Greene book in a single Word document and upload to Canvas. File name: "lastname-exercises."

Exercises to complete:

Ex. 1: 1; 5
Ex. 2: 4; 5
Ex. 3: 1; 3
Ex. 4: 1-2
Ex. 5: 1-2
Ex. 8: 1
Ex. 10: 1
Ex. 11: 1-2
Ex. 12: 3; 5
Ex. 15: 1

This is due Module 3, Sunday, 11:59pm (MST).

ACTIVITY: CONSERVATION WRITING AND READABILITY (90 POINTS)

This assignment includes several components to experiment with and evaluate writing registers and tones and how students recognize and communicate technical or complex language and concepts through your own writing and via a readability app. This activity enables student to put into practice the stylistic and grammatical rules and guidance from Anne Greene and others you have read in the recent modules.

Read all instructions first!

1. First, read the five-paragraph excerpt from the peer-review article, "A framework for investigating illegal wildlife trade on social media with machine learning," below -- you can also choose to review the full article (title and link at end of copy).
2. Open a Word document.
3. Write a ~150-word news brief (short news article) that summarizes the findings and significance for a science-curious/ scientific audience. This should be written in a conventional register, use formal language and even some technical terms yet clearly explain the research and why it



matters. (Example of type of article/writing: "[Corals' hidden genetic diversity corresponds to distinct lifestyles](#)," Science News)

4. Next, in the same document, write a ~150-word news brief (short news article) that summarizes the findings and significance for a general-knowledge audience; think of newspaper and network news websites. This should be written in a popular register, emphasize a story or narrative, avoid technical language and terms overall and clearly define or illustrate any jargon that is considered necessary or important to include. Save your work (name file "lastname-readability") and leave document open.
5. Now, students will open the [Hemingway](http://www.hemingwayapp.com/) app (<http://www.hemingwayapp.com/>) in a web browser and click the "EDIT" box in the top right.
6. Copy those opening five paragraphs (see below) of "A framework for investigating illegal wildlife trade on social media with machine learning," into the Hemingway app. The copied text will include various colored highlights that identify elements that make the work unclear. Note, this is assessed at a "Grade 14" readability, and I have removed in-text citations.
7. Within Hemingway's edit function, edit and revise this text to achieve "Grade 9" readability. You will revise sentences to introduce active voice, reduce long sentences, nominalized and "to be" verbs, noun strings, and overall clutter and jargon. You can delete or fully rewrite sentences and content but the text should be sensible as well as "readable" to an actual reader (me).
8. When your readability is "Grade 9" or lower, copy and paste your revised text from Hemingway into your Word document.
9. Do a screen grab of your revised copy (making sure your readability score is legible) and save as a jpeg file (name it "lastname-Hemingway-grab.") and upload to Canvas.
10. Clear text in the app, and copy and paste your conventional-voiced news brief into Hemingway - record the Grade on your Word document beneath the text you wrote.
11. Copy and paste your popular-voiced news brief into Hemingway -- record the Grade on your Word document beneath the text you wrote.
12. Upload Word doc ("lastname-readability") to Canvas

Your Word document should be double spaced and in 12-point font. This activity is due Week 3, Sunday 11:59pm (MST).

NR 569 marking rubric: Conservation Writing and Readability

Levels of Achievement			
Criteria	Exemplary	Proficient	Below Expectations
Readability and Revision	20 Points Revised content reads at Grade 7 level (Hemingway)	15 Points Content at readability level, Grade 8-9	0 Points Minor/no changes to improve readability
Jargon and Technical language	10 Points Minimal technical terms and language, noun strings, abbreviations.	7 Points Some jargon and unnecessary technical language;	0 Points Excessive jargon. No revisions of any technical language.



	Included jargon has clear definitions.	lacking definitions of complex or unfamiliar terms.	
Conventional news brief	30 Points Clear, concise explanation of article and research. Appropriate voice, length, terms for audience	24 Points Explanation with some jargon, unclear language for audience.	0 Points Unclear summary with technical or complex language for audience. Inappropriate length.
Popular news brief	30 Points Clear, concise explanation of article and research. Appropriate voicelength, terms for audience	24 Points Explanation with some jargon, unclear language for audience.	0 Points Unclear summary with technical or complex language for audience. Inappropriate length.



ACTIVITY: PROFILE OF CONSERVATION COMMUNICATION PROFESSIONALS (120 POINTS)

This assignment allows students to report on, identify, and analyze the roles and responsibilities of conservation communications professionals, including the relationships such individuals have with individuals and organizations inside and outside of their agency or institution. Students will contact and interview two communication professionals from two distinct conservation organizations (public affairs or public information officer, communications director, public/ community relations manager, corporate/business relations manager, media relations director, social/digital media staff, etc.) and learn about their careers and their day-to-day and strategic responsibilities and tasks. Students should plan to inquire about their subjects' views of environmental communications, including public information and awareness, media relations, social media, and the effectiveness of conservation and communications practices related to their own organization's mission. Gaining an in-depth of understanding of conservation communications roles and responsibilities is crucial to identifying and evaluating how managers and scientists can learn from and work with communications professionals in relevant and beneficial relationships for people and the environment.

Through your interviews and reports, students should explore recent and long-term changes in these jobs and duties related to organizational mission shifts, transitions in media, new technology, applications, and tools, and evolving skillsets among peers. Relevant questions include: What kind of communication planning do professionals do, and what planning tools do they use? What is an example of a successful (or not) communication campaign from their organization? How much time and effort do they spend developing targeted messages for key audiences? Have emerging or relevant issues changed over time requiring new knowledge, skills or tools? Do they believe that communicators have an ethical responsibility when it comes to engaging audiences on conservation challenges? What are their expectations of scientists, resource managers, and technical staff they work with?

Students should conduct a 30-60-minute interview with their subjects. Your essay should open with a 1-2-paragraph biographical/professional introduction to your subjects, and then proceed to explain findings from your interviews in narrative form, detailing each subject and conversation individually. Paraphrase answers and minimize use of long quotes with jargon or unclear language. When appropriate, include citations from any supporting research and surveys that relate to the experiences and opinions of your subject. In your conclusion, compare and contrast your sources, their organizations and communications goals, and similarities and differences revealed through your interview. Share what was informative, surprising, or exciting about your interviews and responses.

This activity should be no longer than 1,000 words (4 pages, double spaced). It should be in 12-point font. References should be included using APA 7th style. Please refer to the referencing page in the 'start here' module in the course. This activity is due Week 4, Friday midnight (MST). Please submit this as a Microsoft Word document in Canvas.



NR 569 marking rubric: Profile of Conservation Communication Professionals

Levels of Achievement			
Criteria	Exemplary	Proficient	Below Expectations
Identify two relevant sources for interviews	10 Points Two appropriate sources	5 Points One appropriate source; unclear explanation of individuals or roles	0 Points Content does not relate to topic.
Introduction	15 Points Clear, efficient overview of your sources, their work, and brief explanation of your findings and conclusion	10 Points Introduction that lacks clarity or organization	0 Points Poor or missing section
Explanatory and narrative description of sources' jobs and views	50 Points Thorough and clear review of interview results and findings, including explanation of job roles, responsibilities, and sources' values and opinions on field	30 Points Section has significant gaps in relevant information on sources' jobs and positions	0 Points Limited to no content for section
Analysis and Conclusion	25 Points Clear and thoughtful analysis on responses from sources and how they informed your own view of field and jobs	15 Points Partial effort lacking attention toward analysis of interviews and findings, and influence on your view of field	0 Points Missing or significantly lacking effort with no analysis.
Communication effectiveness/ Mechanics of writing	10 Points Submission is grammatically correct with rare misspellings. Style is conventional, not informal; use of active voice, concise and clear writing, etc.	5 Points Few errors in spelling and grammar. Use of language is sometimes inappropriate for the recommended audience.	0 Points Poorly written; significant spelling, punctuation and grammar errors; unclear and abstract writing.
Format and References	10 Points Clean formatting and referencing following APA guidelines	5 Points Confusing or lacking formatting; partial attention to reference guidelines	0 Points No formatting to organize report; major errors in referencing/citations.



ACTIVITY: AUDIENCE ANALYSIS (150 POINTS)

For this activity, students will research and develop an audience analysis related to a conservation issue. Reports should cite various research and survey data and behavior-change theories to inform your audience segmentation of a general population and your target audience analysis.

Students will identify a conservation issue, and then use available research, datasets, surveys, and other information to segment a general audience into 4-6 publics, and then more thoroughly analyze a target audience. Your segmentation and analysis should be based on psychographic, socioeconomic, and demographic variables and traits, and reference and utilize one or more of the behavior-change theories and frameworks covered through the course.

The audience analysis report is due by Friday midnight (MST) at the end of Week 7. The report is worth 150 points (30% of your final grade).

The report should consist of the following sections:

- Summary/ Overview (350-500 words)
 - Define a conservation topic and establish a discrete geographic area of focus (i.e., state of Utah; Larimer County, Colorado; Everglades National Park)
 - Introduce proposed goal(s) and objectives for communications and actions relative to your conservation issue.
 - Summarize your stakeholder groups, segmentation, and target audience findings and important traits and values.
- Audience segmentation (750-1,200 words)
 - Clearly describe how you would divide or segment a general population related to your focus area based on key common variables and why. This can correspond with established stakeholder groups but should also incorporate your research findings.
 - Explain specific, common traits used for segmentation, including knowledge, attitudes, values, and behaviors, as well as demographic, socioeconomic, and other factors. Provide justification for relevance of these variables and be sure to consider a full and complex range of traits. Be creative but also ground your ideas in course concepts.
 - Reference one or more behavior-change theories or frameworks to develop your segmentation. Will you orient your publics based on egoistic vs. biophysical vs. altruistic values? How are your audience segments defined in terms of innovators, early adopters, laggards, etc.?
 - Cite existing and available datasets, research, and surveys as well as critical data gaps for your audience segmentation. In addition to survey and research data, you should also review and use comparative information from similar cases or other audience analyses, and news/media publications that inform your description of your



conservation issue and your segmentation plans and audience analysis.

- Target audience analysis (750-1,200 words)
 - Identify a target audience that is critical toward achieving your goals and objectives, including its defining common traits based on qualitative and quantitative data and research and news and other informational content. Explain your target public within the broader context of your segmentation.
 - Describe and analyze your target audience through specific traits and data, specifically referring to the characteristics you used to determine your overall audience segmentation. You should offer information and insight about your target public's knowledge (i.e., education and topic literacy), skills, attitudes, values, beliefs, behaviors and activities, and relevant background traits (average age, income, political affiliation, geographic location, urban or rural residence, other socioeconomic and demographic data). Even if you are unable to find survey or other data for your audience, consider news media and other credible sources that can inform your understanding and analysis of important variables. If you are analyzing an organizational audience, such as government agencies or nonprofits, your research should explore agency/ industry size, staff numbers, budgets, program areas and projects, mission, etc. You should also seek to describe how/where your audience receives information (i.e., media channels). Research on your audience should be both quantitative and qualitative.
 - Highlight what you believe is the most useful audience information related to your issue, and who is well-trusted and well-respected among this audience.
 - Conclude your analysis with ideas for at least two messages and at least two communications and action strategies to influence your target audience, based on your findings.
 - Additionally, share gaps in current knowledge about your audience. If you were able to do audience research (perhaps a survey), what information would you seek?
- Visuals
 - Within your report, you should include visuals, such as tables, charts, maps, images, graphs, etc. to illustrate your report content and findings. For all images, students should use descriptive captions so readers know what they're looking at, and be sure to reference visuals in the text, too, when appropriate.
- References
 - Referencing from credible and relevant sources is required to support your claims and justifications. You need to reference if you are referring to information that was taken from another source. Use APA style for all references. If you are unfamiliar with how to



reference, please refer back to the 'Referencing' page under the Orientation (Start here!) module.

Reports should be double-spaced, and 12-point font. Writing should be professional, with the desired audience being an organization's executive-level management, senior staff, and board of directors. Avoid writing in first person.

NR 569 marking rubric: Audience Analysis

Levels of Achievement			
Criteria	Exemplary	Proficient	Below Expectations
Summary/ Overview	15 Points Clear, efficient overview of your issue, findings, analysis	5 Points Unclear or partial introduction, lacking brief review of analysis or findings	0 Points No summary
Audience segmentation	50 Points Thorough and information-based explanation of audiences and reasoning for segmentation; refers to behaviour-change theories and other course content that demonstrates synthesis and analysis	30 Points Section has gaps in content and explanations for segmentation decisions; partial references to behaviour-change concepts and related course content	0 Points Limited to no content for section
Target audience analysis	50 Points Thorough and in-depth description and analysis of your target audience, explaining its relevance and sharing key data and information about this public. References course concepts. Concludes with messages and strategies for target audience	30 Points Section has significant gaps in relevant information and analysis toward target audience; limited ideas for messaging and strategies	0 Points Limited to no content for section
Visuals	10 Points	5 Points	0 Points



	Use of images, graphs, charts, maps, etc. throughout report to illustrate text content, with descriptive captions	Few visuals with sections lacking any accompanying images, etc. Lacking captions	No visuals.
Communication effectiveness/ Mechanics of writing	15 Points Submission is grammatically correct with rare misspellings. Style is conventional, not informal; use of active voice, concise and clear writing, etc. Content flows and demonstrates linkages among sections	10 Points Few errors in spelling and grammar. Use of language is sometimes inappropriate.	0 Points Poorly written; significant spelling, punctuation and grammar errors; unclear and abstract writing.
Format and References	10 Points Clean formatting and referencing following APA guidelines	5 Points Confusing or lacking formatting; partial attention to reference guidelines	0 Points No formatting to organize report; major errors in referencing/citations.



COVID-19

This is an online course and many protocols and planning related to COVID-19 campus operations and public-health practices should not impact our course. This said, your wellness and health matter to me as an instructor and I will do my best to communicate with you and to accommodate situations as they arise. There are also campus resources and support that may be available for you. For information and updates, visit the [CSU COVID Information & Resources page](https://covid.colostate.edu/) (<https://covid.colostate.edu/>).

ACADEMIC INTEGRITY & CSU HONOR PLEDGE

This course will adhere to the [CSU Academic Integrity/Misconduct](#) policy as found in the General Catalog and [the Student Conduct Code](#).

Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I will ask that you affirm the CSU Honor Pledge as part of completing your work in this course.

Plagiarism is the unauthorized or unacknowledged use of another person's academic or scholarly work. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding "credit be given where credit is due."

Source: Writing Guides: Understanding and Avoiding Plagiarism.

<https://writing.colostate.edu/guides/guide.cfm?guideid=17>, Accessed July 2, 2018.

If you plagiarize in your work you can lose credit for the plagiarized work, fail the assignment, or fail the course. Plagiarism can result in expulsion from the university. Each instance of plagiarism, classroom cheating, and other types of academic dishonesty will be addressed according to the principles published in the CSU General Catalog: <https://catalog.colostate.edu/general-catalog/>. A note about Artificial Intelligence (AI)→ submitting work as your own that was generated by AI is plagiarism. Any work written, developed, or inspired by generative AI does not lend itself to our learning goals and is a breach of ethical engagement and CSU's academic integrity policy (from <https://tilt.colostate.edu/ai-and-ai/>).

Academic integrity means more than just avoiding plagiarism. It also involves doing your own reading and studying. It includes regular class attendance, careful consideration of all class materials, and engagement with the class and fellow students. Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community.



UNIVERSAL DESIGN FOR LEARNING/ACCOMMODATION OF NEEDS

I am committed to the principle of universal learning. This means that our classroom, our virtual spaces, our practices, and our interactions be as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning.

If you are a student who will need accommodations in this class, please contact me to discuss your individual needs. Any accommodation must be discussed in a timely manner. A verifying memo from [The Student Disability Center](#) may be required before any accommodation is provided.

The Student Disability Center (SDC) has the authority to verify and confirm the eligibility of students with disabilities for the majority of accommodations. While some accommodations may be provided by other departments, a student is not automatically eligible for those accommodations unless their disability can be verified and the need for the accommodation confirmed, either through SDC or through acceptable means defined by the particular department. Faculty and staff may consult with the SDC staff whenever there is doubt as to the appropriateness of an accommodative request by a student with a disability.

The goal of SDC is to normalize disability as part of the culture of diversity at Colorado State University. The characteristic of having a disability simply provides the basis of the support that is available to students. The goal is to ensure students with disabilities have the opportunity to be as successful as they have the capability to be.

Support and services are offered to student with functional limitations due to visual, hearing, learning, or mobility disabilities as well as to students who have specific physical or mental health conditions due to epilepsy, diabetes, asthma, AIDS, psychiatric diagnoses, etc. Students who are temporarily disabled are also eligible for support and assistance.

Any student who is enrolled at CSU, and who self-identifies with SDC as having a disability, is eligible for support from SDC. Specific accommodations are determined individually for each student and must be supported by appropriate documentation and/or evaluation of needs consistent with a particular type of disability. SDC reserves the right to ask for any appropriate documentation of disability in order to determine a student's eligibility for accommodations as well as in support for specific accommodative requests. The accommodative process begins once a student meets with an accommodations specialist in the SDC.

THIRD-PARTY TOOLS/PRIVACY



Please note that this course may require you to use third-party tools (tools outside of the Canvas learning management system), such as Skype and others. Some of these tools may collect and share information about their users. Because your privacy is important, you are encouraged to consult the privacy policies for any third-party tools in this course so that you are aware of how your personal information is collected, used and shared.

COPYRIGHTED COURSE MATERIALS

Please do not share material from this course in online, print, or other media. Course material is the property of the instructor who developed the course. Materials authored by third parties and used in the course are also subject to copyright protections. Posting course materials on external sites (commercial or not) violates both copyright law and the CSU Student Conduct Code. Students who share course content without the instructor's express permission, including with online sites that post materials to sell to other students, could face appropriate disciplinary or legal action.

UNDOCUMENTED STUDENT SUPPORT

Any CSU student who faces challenges or hardships due to their legal status in the United States and believes that it may impact their academic performance in this course is encouraged to visit [Student Support Services for Undocumented, DACA & ASSET](#) for resources and support. Additionally, only if you feel comfortable, please notify your professor so they may pass along any additional resources they may possess.

TITLE IX/INTERPERSONAL VIOLENCE

For the full statement regarding role and responsibilities about reporting harassment, sexual harassment, sexual misconduct, domestic violence, dating violence, stalking, and the retaliation policy please go to: <https://titleix.colostate.edu/>.

If you feel that your rights have been compromised at CSU, several resources are available to assist:

- Student Resolution Center, 200 Lory Student Center, 491-7165
- Office of Equal Opportunity, 101 Student Services, 491-5836

A note about interpersonal violence: If you or someone you know has experienced sexual assault, relationship violence and/or stalking, know that you are not alone. As instructors, we are required by law to notify university officials about disclosures related to interpersonal violence. Confidential victim advocates are available 24 hours a day, 365 days a year to provide support related to the emotional, physical, physiological and legal aftermath of interpersonal violence. Contact the Victim Assistance Team at: 970-492-4242.



RELIGIOUS OBSERVANCES

CSU does not discriminate on the basis of religion. Reasonable accommodation should be made to allow individuals to observe their established religious holidays. Students seeking an exemption from attending class or completing assigned course work for a religious holiday will need to fill out the [Religious Accommodation Request Form](#) and turn it in to the Division of Student Affairs, located on the second level of the Administration building.

Once turned in, the Division of Student Affairs will review the request and contact the student accordingly. If approved, the student will receive a memo from the Dean of Students to give to their professor or course instructor.

Students are asked to turn in the request forms as soon as the conflict is noticed. Similarly, unanticipated conflicts requiring a religious observance, such as a death in the family, can also be reviewed.

CSU PRINCIPLES OF COMMUNITY

Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents and contributions.

Integrity: We are accountable for our actions and will act ethically and honestly in all our interactions.

Respect: We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

Service: We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

Social Justice: We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

DIVERSITY AND INCLUSION

The Office for Inclusive Excellence: <https://inclusiveexcellence.colostate.edu/> includes a comprehensive statement of CSU's commitment to diversity and inclusion. Diversity & Inclusion information specific to the Warner College of Natural Resources can also be found here warnercnr.colostate.edu/diversity/.

SYSTEM, MULTIMEDIA, AND SOFTWARE REQUIREMENTS

For this course, it is recommended that you use Google Chrome as your web browser. This will ensure that the weekly content and pdf links function as designed. If you do not have Google Chrome, you will still be able to access the content for this course, however, you may have to download it as a pdf file.



Furthermore, web links may need to be copied into your web browser as they may not be automatically linked.

Having trouble with the multimedia in this course? See the solutions below. Also, it is highly recommended that you access your course via a **high-speed Internet connection**.

- Problems with opening PDFs?
 - Download [Adobe Reader](#).
- Canvas acting funny?
 - Download the correct version of [Java](#) for Canvas.
- YouTube videos not playing?
 - Download [Flash Player](#).
- Videos not opening or playing on your Mac?
 - Download [Windows Media Components for QuickTime](#).
- Can't open content created with Microsoft Office Products? Download the following viewers:
 - [Word Viewer](#)
 - [PowerPoint Viewer](#)
 - [Excel Viewer](#)
 - [Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint File Formats](#)
- Still having issues:
 - Call the **CSU Help Desk at 970-491-7276** or [Email Help Desk Support](#)

You must have speakers installed and working properly on your computer before beginning the course.

You may need access to Microsoft Word, PowerPoint, and/or Excel to complete assignments. If you do not have access to the Microsoft Office applications, you may use one of the following free resources that allow you to save your files with Microsoft Office file extensions (.doc, .docs, .ppt, .xls.):

- [Google Apps for CSU](#)—a free, outsourced communications suite endorsed by The University Technology Fee Advisory Board (UTFAB)
- [Open Office](#)—an open source productivity suite

LIBRARY AND RESEARCH ASSISTANCE

<https://lib.colostate.edu/>

The CSU Libraries offers a variety of resources and services to support the campus community. The Libraries' [24/7 Chat service](#) provides immediate help at any time. In-depth research questions may be



directed to the Library [Research Questions form](#), and they will be referred to the appropriate expert. See the [Contact Us page](#) for other ways you can reach the library.

