

Term Information

Effective Term Autumn 2022
[Previous Value](#) [Spring 2015](#)

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

Inclusion of Comm 2596 as part of the new GE theme in Sustainability. Minor update to course title and description to better describe course and its content.

What is the rationale for the proposed change(s)?

Course aligns with the expected learning outcomes of this GE theme area.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

None.

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area Communication
Fiscal Unit/Academic Org School Of Communication - D0744
College/Academic Group Arts and Sciences
Level/Career Undergraduate
Course Number/Catalog 2596
Course Title Introduction to the Communication of Science, Health, Environment, & Risk
[Previous Value](#) [An Introduction to Health, Environment, Risk & Science Communication](#)
Transcript Abbreviation Comm SciHltEnv&Rk
[Previous Value](#) [Hlh Env Rsk Sc Com](#)
Course Description This course provides a general introduction to the fields of science, risk, environmental and health communication from multiple perspectives including psychological, social, cultural, and sustainability sciences. Students will apply theories and research covered in class to address real-world challenges of communicating science, health, environment, and risk to wide audiences.
[Previous Value](#) [Provides a general introduction to the fields of science, risk, environmental and health communication from multiple perspectives including psychological, social, and cultural. Students will develop a prototype communication intervention or campaign to address a health, safety, or environmental issue drawing on theories and research covered in the course.](#)
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week, 12 Week, 8 Week, 7 Week, 6 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No

Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus, Lima, Mansfield, Marion, Newark, Wooster
<i>Previous Value</i>	<i>Columbus</i>

Prerequisites and Exclusions

Prerequisites/Corequisites	
Exclusions	
Electronically Enforced	No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	09.0101
Subsidy Level	Baccalaureate Course
Intended Rank	Freshman, Sophomore

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
General Education course:
Cross-Disciplinary Seminar (597 successors and new); Sustainability
The course is an elective (for this or other units) or is a service course for other units

Previous Value

Required for this unit's degrees, majors, and/or minors
General Education course:
Cross-Disciplinary Seminar (597 successors and new)
The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes	<ul style="list-style-type: none">• Know the range of contexts in which scholarship from communication, psychology, sociology, environmental studies, and health sciences can be applied to science, risk, environmental and health communication.• Understand and be able to explain how foundational and emerging theories and methods of communication, psychology, sociology, environmental studies, and health sciences can be used to improve health, safety, and environmental outcomes.• Effectively apply theory and research findings in science, risk and/or health communication to a practical health, safety, or environmental concern.
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Content Topic List

- Risk perception & uncertainty (psychological & sociological approaches)
- Risk communication
- Development risk messages
- Approaches to science communication
- Public engagement and science
- Science and entertainment
- Science, health, and environmental literacy
- Environmental communication
- Media coverage of environmental issues
- Crisis communication
- Environmental advocacy
- Interpersonal and organizational health communication
- Diversity and cultural issues
- Media and health outcomes
- Health and environmental campaigns
- New communication technology and health, science, and environmental communication

Sought Concurrence

No

Attachments

- Communication 2596 Sustainability Theme Submission.docx: GE course submission form
(Other Supporting Documentation. Owner: Jackson, Kylie M.)
- Comm Curriculum Map UPDATED 2020.docx: Curriculum Map
(Other Supporting Documentation. Owner: Jackson, Kylie M.)
- Regional campus GE memo.docx: Regional campus memo
(Memo of Understanding. Owner: Jackson, Kylie M.)
- AU21 Comm 2596 Syllabus Dixon.docx: Syllabus
(Syllabus. Owner: Jackson, Kylie M.)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Jackson, Kylie M.	10/05/2021 01:05 PM	Submitted for Approval
Approved	Garrett, Robert Kelly	10/05/2021 01:05 PM	Unit Approval
Approved	Vankeerbergen, Bernadette Chantal	11/10/2021 01:47 PM	College Approval
Pending Approval	Cody, Emily Kathryn Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Hilty, Michael Vankeerbergen, Bernadette Chantal Steele, Rachel Lea	11/10/2021 01:47 PM	ASCCAO Approval

Communication 2596: Introduction to the Communication of Science, Health, Environment, & Risk

Wednesday & Friday 12:45pm– 2:05pm, Dreese Lab, 305

Instructor: Dr. Graham Dixon

Derby Hall 3045A

Email: dixon.716@osu.edu

Office Hours: Wednesdays 2:00pm – 3:30pm

GE category: Cross-Disciplinary Seminar

Goals: Students demonstrate an understanding of a topic of interest through scholarly activities that draw upon multiple disciplines and through their interactions with students from different majors.

Expected Learning Outcomes

1. Students understand the benefits and limitations of different disciplinary perspectives.
2. Students understand the benefits of synthesizing multiple disciplinary perspectives.
3. Students synthesize and apply knowledge from diverse disciplines to a topic of interest.

Course Description

This course provides a general introduction to the fields of science, risk, environmental and health communication from multiple perspectives including psychological, social, cultural, and sustainability sciences. Students will apply theories and research covered in class to address real-world challenges of communicating science, health, environment, and risk to wide audiences.

This course meets the GE goals and expected learning outcomes by examining...

- How audiences understand and process science and risk information
- The effectiveness of public health and environmental campaigns
- The role of the mass media in shaping scientific understanding and beliefs
- Informal science learning
- Risk perception and its role in shaping public policy

In many cases we will focus on issues that have high public salience such as climate change, vaccination, research ethics, nuclear power, genetically modified foods, cancer, human evolution, etc. While many of the topics we discuss are controversial and polarizing, the purpose of the course is to understand the communication processes and effects behind these topics. For example, why are so many science and health issues controversial? What role do cultural and political values play in polarizing people's views on science and risk? And can communication interventions change people's minds about controversial issues? Rather than advocate for a particular position, our goal is to explore these topics through an objective lens as academic observers.

Due to its high relevance, COVID-19 will be prominently featured in this course.

Content from this course benefits students with an interest in a variety of careers, including public policy, public health, communication research, advertising, science education, and public relations, to name a few.

Mode of Course Delivery and Attendance Policy

This course is delivered as an in-person lecture. However, all lecture content will be recorded and posted promptly on the Carmen site; all assignments and exams will be offered online. Thus, students are given an option to complete the course outside of lecture if they choose to do so without any penalty so long as assignments and exams are completed on time. Given the continued high prevalence of COVID, including breakthrough cases among vaccinated individuals, **students should not attend class if they are feeling sick**. It is very important that individuals avoid spreading the virus to others. Most students should be able to complete a successful semester despite illness-induced absence. If you are absent due to illness, including but not limited to COVID, I will give you a reasonable opportunity to make up missed work. **You do not need to provide a physician's document of illness, but you should advise me via email as soon as you are safely able to do so.**

Grading

Assignments	Points	% of Final Grade
Movie Review	25	25%
In-Class/Online Assignments	25	25%
Exam I	25	25%
Exam II	25	25%
Final Exam	25	25%

lowest exam score is dropped

A = 93-100; **A-** = 90-92; **B+** = 87-89; **B** = 83-86; **B-** = 80-82; **C+** = 77-79; **C** = 73-76; **C-** = 70-72; **D+** = 67-69; **D** = 60-66; **F** = Below 60

Assignments and Exams

Required Readings. There is no textbook for this course. Instead, PDFs of selected chapters and articles will be posted on Carmen for each class – refer to the course schedule for each day's assigned readings. Students are expected to complete all readings prior to class so that they will be prepared to discuss the material in class. If any student is interested in additional readings on the assigned or related topics, please feel free to contact me and I can suggest additional resources.

In-class/online Assignments. Throughout the semester, I will stop lecturing and pass out in class assignments. Some assignments will involve solo work with class discussion; other times I will break the class up into groups. You will be graded on your participation and completion of the assignment. There will be ten in-class assignments in total. **Students who are absent from**

class can complete an alternative online assignment on CARMEN with a 24 hour deadline for completion. Email announcements will be regarding the availability of the alternative online assignment.

Movie Review. Students will conduct an academic review of a science-based film from a list of approved films. Specifically, students will apply theories and concepts learned in class when assessing their chosen film. Importantly, this is a fun assignment that gets students thinking more deeply about how popular films/entertainment might impact public understanding of science. The paper will be between 10-12 pages double spaced, not including references. You will turn in your paper digitally through Carmen.

Exams. You have three online exams in this course. However, I drop your lowest score. This means that if you do well on the first two exams, you can skip the final exam. Also, if you miss one exam, then that will be treated as your dropped exam. Because of this policy, I do not allow makeup exams. All exams will be assessed with multiple choice, fill in the blank, and short answer questions. Access to exams will be for a 9 hour period on a specific date (see course schedule). The first exam covers our science and environmental sections; the second exam covers our health and risk sections. The final is cumulative, covering all material taught in class. All exams are open book and are administered on the course's Carmen site.

All exams cover in-class material as well as content from your readings. To do well in this course means you will need to read every assigned reading.

Course Policies

Mutual Respect. Students in this class come from a variety of personal, political, and academic backgrounds, so realize that there will be different perspectives. Your responsibility is to be civil to others and to opinions that differ from yours.

Technology use and General Politeness. Technology (phones, laptops, etc) use for non-class related reasons can be very distracting for the professor and for classmates. You're paying a lot of money for this course, so don't waste it on Facebook and texting with friends that you'll see later in the day. The professor reserves the right to take off grade points for repeat offenders.

Professor and Teaching Assistant's Use of Electronic Mail and Messaging. There may be occasions where I will need to get in touch with you outside of regular class hours. Email will usually be the first means by which contact will be initiated. It is important that you check your OSU email account regularly, and make sure you purge your account of unneeded email so that new email can get through. If you do not use your OSU email address as your primary email account, please arrange through OIT to have your OSU email forwarded to your preferred account. For instructions on how to have your email forwarded, see http://8help.osu.edu/forms/mail_forwarding.html.

Academic Misconduct. It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic

misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.”

All instances of cheating and plagiarism will be reported to COAM for a formal hearing. Please do not cheat or plagiarize. Maximum grade penalty is failing the entire course.

Statement about disability services. Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, slds@osu.edu.

Diversity. The School of Communication at The Ohio State University embraces and maintains an environment that respects diverse traditions, heritages, experiences, and people. Our commitment to diversity moves beyond mere tolerance to recognizing, understanding, and welcoming the contributions of diverse groups and the value group members possess as individuals. In our School, the faculty, students, and staff are dedicated to building a tradition of diversity with principles of equal opportunity, personal respect, and the intellectual interests of those who comprise diverse cultures.

Title IX. Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at titleix@osu.edu

COVID-19 Accommodations. The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university’s [request process](#), managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. **SLDS contact information:** slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Course Schedule

Week and Dates	Week Overview	Readings/Major Assignments
<p style="text-align: center;">1</p> <p style="text-align: center;">8/25-8/27</p>	<p>Introduction to the course What is Science Communication?</p>	<ul style="list-style-type: none"> • Burns et al. 2003 • Scheufele, 2013 • Brossard and Scheufele, 2013
<p style="text-align: center;">2</p> <p style="text-align: center;">9/1-9/3</p>	<p>The (counter)norms of scientists Public perception of scientists</p>	<ul style="list-style-type: none"> • Mitroff article • Pew Research Report, 2019 (skim through) • Suldovsky et al. 2019
<p style="text-align: center;">3</p> <p style="text-align: center;">9/8-9/10</p>	<p>Public understanding of science Science and entertainment media</p>	<ul style="list-style-type: none"> • Funk and Goo, 2015 • Leiserowitz • Sparks • Bullock et al 2019 • Landrum et al., 2021
<p style="text-align: center;">4</p> <p style="text-align: center;">9/15-9/17</p>	<p>Science in the news part 1 Science in the news part2</p>	<ul style="list-style-type: none"> • Boykoff & Boykoff, 2004; • Maier et al., 2014 • Jensen et al., 2011
<p style="text-align: center;">5</p> <p style="text-align: center;">9/22-9/24</p>	<p>Science “denialism” Science communication persuasion</p>	<ul style="list-style-type: none"> • Nisbet et al., 2015 • Cook 2016; • Pennycook et al. 2020 • Hart and Nisbet, 2013 • Basol et al., 2020
<p style="text-align: center;">6</p> <p style="text-align: center;">9/29-10/1</p>	<p>Environmental communication introduction Environmental values</p>	<ul style="list-style-type: none"> • McCright et al; • Feinberg and Willer
<p style="text-align: center;">7</p> <p style="text-align: center;">10/6-10/8</p>	<p>Environment and organizations Green marketing</p>	<ul style="list-style-type: none"> • Schuldt 2013

8 10/13 Autumn break 10/15	Environmental advocacy and campaigns	<ul style="list-style-type: none"> • Carrico and Reimer, 2011 • Dixon et al., 2015 <p>Exam 1 link available on 10/13 from 8am to 10pm EST</p>
9 10/20-10/22	What is Risk?	<ul style="list-style-type: none"> • Slovic, 1987 • McComas, 2006
10 10/27-10/29	Risk and Rationality part 1 Risk and Rationality part 2	<ul style="list-style-type: none"> • Loewenstein et al. 2001 • Kahneman Ch 13 and 14 <p>Movie Review Due by 10/29, 11:59PM Eastern time, on Carmen</p>
11 11/1-11/8	Risk and technology Communicating Risk	<ul style="list-style-type: none"> • Abraham et al., 2016 • Fischhoff article
12 11/3-11/5	Health communication: why is it necessary? Public health campaigns	<ul style="list-style-type: none"> • Byrne et al., 2019 • Drope and Chapman, 2001
13 11/10-11/12	Digital health	<ul style="list-style-type: none"> • Ahn, 2015 • Nowak et al., 2020 • Li et al., 2011
14 11/17-11/19 Thanksgiving break 11/24- 11/26	Health controversies, part 1	<ul style="list-style-type: none"> • Nyhan et al, 2014 • Horne et al., 2015 • Islam et al., 2020a • Islam et al., 2020b
15 12/1-12/3	Health controversies, part 2	
16 12/8	Health controversies, part 3	Exam 2 link available on 12/8 from 8am to 10pm EST
Final Exam	Fri Dec 11	Final exam link available on December 13 from 8am to 10pm EST.



October 5, 2021

MEMO

TO: College of Arts and Sciences Curriculum Committee

FROM: Susan Kline, Undergraduate Program Committee Chair, School of
Communication

RE: COMM 2596 GE Theme Submission

Regarding the availability of this course for the OSU regional campuses, it is our understanding that the offering of this course by non-tenure-track faculty on the Ohio State regional campuses requires the approval of the home department.

The School of Communication would request that any regional campus wishing to offer this course first send their proposed course syllabus to the School Director for their review and comments prior to offering the class.

Sincerely,

Dr. Susan Kline
Associate Professor
Undergraduate Program Committee Chair
School of Communication

Communication

Curriculum map, indicating how program goals are accomplished via specific courses.

Program learning goals

Goal 1. Students demonstrate knowledgeable of communication concepts, theories, and principles within a social science framework to understand the role of communication in society.

Goal 2. Students are competent in practicing communication for a range of purposes, audiences, contexts and modalities.

Goal 3. Students are sufficiently trained and prepared to obtain employment in the field of communication or related to the field of communication.

	Goal 1: Comm Principles	Goal 2: Comm Practice	Goal 3: Career Preparation
Premajor			
1100	Basic		
1101	Basic		
Research Methods (4 cr. req.)			
3160(H)	Intermediate	Intermediate	
3163	Intermediate		
3165	Intermediate		
Core Requirements			
<i>Comm Analysis & Engagement</i>			
2110	Basic	Intermediate	
2367(H)	Basic	Intermediate	
3440	Intermediate	Intermediate	
3620	Intermediate	Intermediate	
<i>Comm Tech</i>			
2367(H)	Basic	Intermediate	Intermediate
2511	Basic	Intermediate	Intermediate
2540	Basic	Basic	Basic
3554	Intermediate	Intermediate	Intermediate
<i>Strategic Comm</i>			
2321	Basic	Intermediate	Intermediate
2331	Basic	Intermediate	Intermediate
3333 <i>or</i>	Basic	Intermediate	Intermediate
3444	Intermediate	Intermediate	Basic
3334	Basic	Advanced	Intermediate
4337	Basic	Advanced	Intermediate
Experiential Learning (3 cr. req.)			
3188	Intermediate	Intermediate	Advanced
3800	Intermediate	Advanced	Advanced
4191			Advanced
4998	Advanced	Advanced	
4999(H)	Advanced	Advanced	
Focus Area Electives			
<i>Comm Analysis & Engagement (15 credit hours required)</i>			
2131	Basic	Intermediate	
2596	Basic	Basic	
3325	Intermediate	Intermediate	Intermediate

	Goal 1: Comm Principles	Goal 2: Comm Practice	Goal 3: Career Preparation
3330	Basic	Intermediate	Basic
3331	Intermediate	Intermediate	
3332	Intermediate	Intermediate	Basic
3340	Intermediate	Intermediate	
3402	Intermediate	Basic	
3403	Intermediate		
3404	Intermediate		
3413	Intermediate		
3415	Basic	Intermediate	
3442	Intermediate		
3450	Intermediate	Basic	
3466	Intermediate		
3597.01	Intermediate		
3597.02	Intermediate		
3624	Intermediate	Intermediate	Intermediate
3628	Advanced	Intermediate	Intermediate
3629	Intermediate	Intermediate	Intermediate
3662	Intermediate	Intermediate	
3667	Intermediate	Intermediate	Basic
3668	Intermediate	Intermediate	Basic
4240		Intermediate	
4401	Intermediate		
4445	Intermediate	Intermediate	
4600		Intermediate	
4635		Intermediate	Intermediate
4736	Intermediate	Intermediate	
4737	Intermediate	Intermediate	Basic
4738	Intermediate	Intermediate	
4814	Intermediate	Intermediate	
4820	Intermediate	Intermediate	
<i>Comm Tech (6 credit hours required)</i>			
3513	Intermediate	Intermediate	Basic
3558	Intermediate	Intermediate	
4557	Advanced	Advanced	Intermediate
4558	Advanced	Advanced	Intermediate
4665	Advanced	Advanced	Intermediate
4738	Advanced	Advanced	Intermediate
<i>Strategic Comm (9 credit hours required)</i>			
2367(H)	Basic	Intermediate	Intermediate
2511	Basic	Intermediate	Intermediate
3325	Intermediate	Intermediate	Intermediate
3330	Basic	Intermediate	Intermediate
3332	Intermediate	Intermediate	Intermediate
3333	Basic	Intermediate	Intermediate
3340	Intermediate	Intermediate	Intermediate
3345	Basic	Intermediate	Intermediate
3444	Intermediate	Intermediate	Intermediate
3558	Intermediate	Intermediate	
3628	Advanced	Intermediate	Basic
3668	Intermediate	Intermediate	Basic

	Goal 1: Comm Principles	Goal 2: Comm Practice	Goal 3: Career Preparation
4445	Intermediate	Intermediate	Intermediate
4558	Basic	Advanced	Intermediate
Special Topic Elective			
<i>Comm Tech (9 credit hours required)</i>			
3330	Basic	Intermediate	Intermediate
3331	Intermediate	Intermediate	Intermediate
3513	Intermediate	Intermediate	Basic
3545	Intermediate	Intermediate	Intermediate
4511	Intermediate	Advanced	Intermediate
4555	Advanced	Advanced	Intermediate
4556	Advanced	Advanced	Intermediate
4557	Advanced	Advanced	Intermediate
4665	Advanced	Advanced	Intermediate
CS&E 2123			
<i>Strat Comm (3 credit hours required)</i>			
2110	Basic	Intermediate	Basic
2131	Basic	Intermediate	Intermediate
2367 (H)	Basic	Intermediate	Intermediate

GE THEME COURSES

Overview

Courses that are accepted into the General Education (GE) Themes must meet two sets of Expected Learning Outcomes (ELOs): those common for all GE Themes and one set specific to the content of the Theme. This form begins with the criteria common to all themes and has expandable sections relating to each specific theme.

A course may be accepted into more than one Theme if the ELOs for each theme are met. Courses seeking approval for multiple Themes will complete a submission document for each theme. Courses seeking approval as a 4-credit, Integrative Practices course need to complete a similar submission form for the chosen practice. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you develop and submit your course.

Please enter text in the boxes to describe how your class will meet the ELOs of the Theme to which it applies. Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document. Because this document will be used in the course review and approval process, you should be *as specific as possible*, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Comm 2596

Course subject & number

General Expectations of All Themes

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

Please briefly identify the ways in which this course represents an advanced study of the focal theme. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities. *(50-500 words)*

This course represents advanced study of the sustainability theme by providing students a thorough grounding on:

- How audiences understand and process science and risk information related to sustainability
- The effectiveness of environmental and health campaigns
- The role of the mass media in shaping environmental and scientific understanding and beliefs
- Informal science learning
- Risk perception and its role in shaping public policy

More specifically, this course involves deep engagement with issues that have high public salience such as climate change, vaccination, research ethics, nuclear power, genetically modified foods, cancer, human evolution, etc. While many of the topics we discuss are controversial and polarizing, the purpose of the course is to understand the communication processes and effects behind these topics. There is considerable focus on sustainability-related themes and the corresponding communication challenges that they are faced with. For example, we address why so many science and environmental issues become controversial. What role do cultural and political values play in polarizing people’s views on science and risk? And address how communication interventions change people’s minds about controversial issues. Rather than advocate for a particular position, our goal is to explore these topics through an objective lens as academic observers.

By exploring theories and communication processes within the subfields of science and environmental communication, this course provides more in-depth discussion of communication theories than lower-level communication courses (e.g., comm 1101 and 1100).

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

This course includes in-class activities that demonstrate various theories and concepts from lecture. Many of these activities provide clear examples of decision making and information processing biases that students frequently engage in. For instance, we perform a demonstration on priming and framing effects, which is used to highlight concepts such as the naturalistic fallacy and prospect theory. In doing so, students are shown how subtle cues in messaging can have a profound impact on people's attitudes toward environmental sustainability. Another activity involves the omission bias, which suggests reactions to outcomes related to inaction are less arousing than identical outcomes related to action. Students are asked to consider various hypothetical scenarios involving identical outcomes, but different causes. Class discussion is used to explain concepts related to utilitarianism and consequentialism, and how such concepts can relate to environmental decision making and communication. In particular, this activity is used to demonstrate the difficulties in communicating the risks associated with climate change inaction, and how different theoretical approaches toward sustainability might be necessary for encouraging sustainability actions among the public.

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

This course has students engage in an advanced, in depth, scholarly exploration with the topic and theme of sustainability. For their main paper, students will conduct an academic review of a science or environment-based film from a list of approved films. Specifically, students will (1) provide a summary of the film's plot, (2) assess the accuracy of the scientific/environmental claims made in the film, (3) consider the effects of the film on audience attitudes and behavior by drawing on communication theory. Importantly, this is a fun assignment that gets students thinking more deeply about how popular films/entertainment might impact public understanding of science and sustainability attitudes. Films such as *The Day After Tomorrow*, *Jurassic Park*, and *Contagion* are popular choices among students – all of which involve sustainability themes. The paper is 10 pages double spaced, not including references.

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Students in Comm 2596 are constantly reminded of how the course content, specifically communication theories, connect with issues that involve sustainability. For instance, one specific assignment has students find different news media frames of climate change using their personal computers or smartphones in class, and then discussing in class how the different frames might impact people's attitudes and policy support. Accompanying this activity are a series of articles that students are required to read that explore messaging tactics aimed at depolarizing politicized sustainability issues. In another assignment, students are asked to consider the relationship between science knowledge and beliefs, and how the two are not necessarily correlated for politically-polarized sustainability topics. For instance, students are asked to estimate how increased science knowledge associates with attitudes and risk perceptions toward issues like climate change or nuclear power. Most students predict a positive linear relationship between the two, but are surprised to learn that research finds that for politicized sustainability issues (e.g., climate change and nuclear power), increased science knowledge can increase polarization, rather than decrease it. This activity allows for greater discussion on how our assumptions about the relationship between knowledge and beliefs regarding politicized sustainability issues is often challenged by evidence.

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

A prominent way in which students engage in self-assessment and reflection is through their participation in class activities. These activities are designed to help students develop a greater sense of themselves as learners by encouraging greater critical thinking and introspection. To do so, these activities are often designed to challenge students' assumptions about human communication as well as demonstrate the biases inherent in how we process information. In one activity, I demonstrate gain/loss framing effects which suggests that people typically prefer certain gains over probabilistic losses (on the hand, people prefer probabilistic losses over certain losses) – even when information framed as a gain versus a loss is communicating the same numerical outcome. By using students as participants and discussing their responses, I'm able to illustrate heuristic processing of information, as well as connect it to broader science and environmental issues (e.g., challenges in communicating gains versus losses with climate change risks versus mitigation policies).

Specific Expectations of Courses in Sustainability

GOAL 1: Students analyze and explain how social and natural systems function, interact, and evolve over time; how human wellbeing depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors, and institutions impact multi-faceted, potential solutions across time.

1.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems and on the resilience of these systems. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

This course fits nicely within the sustainability theme by consisting heavily of content related to environmental communication. Specifically, the course features theories related to human-environment interaction (as well as science and risk communication), with focus on human dependence on earth and environmental resources. For instance, we include discussion of the anti-reflexivity thesis with in-class lectures and an assigned reading of Professor Aaron McCright's research on differences in scientific trust among Republicans and Democrats. In this study, McCright reports that Democrats (who are more aligned with the reflexivity movement) tend to trust Impact Science – science that investigates the impact of industrial modernization on human and environmental health; whereas Republicans (who typically are more aligned with the anti-reflexivity movement) show greater trust toward Production Scientists – scientists involved in the economic production of goods and services. This study serves as a nice springboard for discussion on political-polarization of sustainability issues (e.g., climate change and nuclear power).

1.2 Describe, analyze and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, currently, and in the future. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

This course has students analyze and critique the roles and impacts of human activity on the natural world, with specific focus on issues like climate change, genetically modified organisms, as well as well as emerging technology. For instance, one of our in-class activities involves discussing public perception of risks and benefits of autonomous vehicles – an emerging technological feature in personal transport that could provide important benefits to sustainability. We use autonomous vehicles as an example of how public perception of risks typically do not correspond with actual risk estimates, and explain why that is the case by linking the content to specific theories in risk perception and communication.

1.3 Devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Students devise informed and meaningful responses to problems and arguments in the area of sustainability by engaging with material related to environment, health, risk, and science communication. In their movie review assignment, students are asked to explain any changes that they would have made to the film so to as to impact audiences in a particular way. Many students draw on persuasion theory and discuss how their chosen film could have presented environmental themes more accurately for better public understanding of science.