# WRTG 3030-021: Environmental Health Science, Policy, and Ethics

2018 Spring Semester Tues/Thurs, 9:30-10:45am CHEM 133

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#### **Course Overview and Objectives**

This interdisciplinary course teaches conventions of academic research and writing by examining current domestic and global public and environmental health hazards—which challenge students to engage difficult texts in the health sciences, environmental policy, environmental law, and social justice. Some of the issue-areas we will explore include pesticides in foods, infectious diseases and emerging pandemics, antibiotic resistance, and leaded gasoline emissions and underground storage tanks. Through diverse course readings, independent research, formative writing assignments, and the critical evaluation of contemporary scholarship on these issue-areas, students will learn to identify, critique, and apply common conventions of research, analysis, and writing that define scholarship in their respective majors. And in having students apply lessons of rhetorical analysis learned in the classroom to real-world complex policy problems, this course strives to motivate students to think critically about the role that science should have in creating public policy, the influence of corporate special interests on the decision-making process, and the responsibilities the educated citizen and researcher has to her community.

#### **Writing Objectives**

This writing course meets two sets of requirements here on the CU-Boulder campus.

The first set consists in the requirements established by the Colorado Commission on Higher Education for all third-level "Communication General Education 'Guaranteed Transfer'" (CO-3) courses in the state. These CO-3 courses are designed to ensure that students understand "how to summarize, analyze, and synthesize the ideas of others" and "learn more sophisticated ways of communicating knowledge...in the context of a specific discipline" (par. 3). This is achieved by extending "rhetorical knowledge," "writing processes [and] conventions," and "comprehension of content knowledge at the advanced level" (par. 6).

The second set consists in the requirements established by the Program for Writing and Rhetoric (PWR), which is the home program for this course. These include your capacities to:

- *develop rhetorical knowledge*—analyzing and making informed choices about purposes, audiences, and context as you read and compose texts.
- *analyze texts in a variety of genres*—understanding how content, style, structure and format vary across a range of reading and writing situations.
- refine and reflect on your writing process—using multiple strategies to generate ideas, draft, revise, and edit your writing across a variety of genres.
- *develop information literacy*—locate and evaluate sources, critically analyze the merit of your sources and their relevance to your own writing, and successfully integrate your sources into your writing.
- *construct effective arguments*—using appropriate reasons, evidence, and logical analysis to support your positions while responding to multiple points of view.
- *understand and apply language conventions rhetorically*—including grammar, spelling, punctuation and format, (These several considerations are adapted from the PWR First Year Committee.)

In light of these requirements, our writing course this semester will ask you to:

1. develop rhetorical knowledge by reading and writing a range of academic arguments—which will attend to a variety of rhetorical considerations, including context, audience, purpose, rhetorical appeals, genre- and discipline-specific conventions of writing and research, and so forth—while using effective evidence and providing appropriate analysis;

- 2. develop an intimate understanding of writing processes and information literacy by drafting, revising, editing, and proofreading your own work; by reading and critiquing the work of others; and by engaging in a number of formative writing assignments using primary and secondary source materials;
- 3. develop a working understanding of the conventions and principles of academic research, analysis and writing in your discipline of study, and to implement these conventions and principles in your writing;
- 4. explore the broader implications of scientific research and writing, as well as our obligations to our communities as educated students and writers.

To accomplish these goals, you will spend extensive time this semester working alone and in groups. You are also encouraged to meet with me one-on-one to discuss your paper assignments.

# Required Textbooks

There are two required text for this course:

- Weston, Anthony. A Rulebook for Arguments, 4th ed. (Indianapolis: Hackett Publishing, 2009).
- Okasha, Samir. *Philosophy of Science: A Very Short Introduction*, 2nd ed. (Oxford: OUP, 2016).

All other required readings will be made available on Canvas (http://canvas.colorado.edu).

#### **University and Course Policies**

Attendance: Since we will have several writing and peer-review workshops and other in-class activities, as detailed in the course requirements below, there is a formal attendance policy for this class. Students are permitted (2) <u>unexcused</u> absences without penalty, after which each subsequent unexcused absence will result in a 5% deduction in their attendance grade.

- Note that even when excused, more than (6) absences may result in an F for the course.
- **Classroom Etiquette**: be respectful of and considerate toward your classmates. I am committed to establishing an atmosphere that fosters open, civil, and constructive lines of communication, and inappropriate or offensive conduct will not be tolerated. *If you feel uncomfortable at any time with any aspect of the class environment, I strongly encourage you to come discuss your concerns with me.*
- **Disability Accommodations**: If you qualify for accommodations because of a disability, please submit a letter to me from Disability Support Services (DSS) in a timely manner so that your needs may be accommodated. DSS requires that disabilities be documented, and can be contacted at 303.492.8671 or at <a href="mailto:dsinfo@colorado.edu">dsinfo@colorado.edu</a>. If you have a temporary medical condition or injury, see Temporary Injuries under Quick Links at Disability Services website (<a href="http://disabilityservices.colorado.edu/">http://disabilityservices.colorado.edu/</a>) and discuss your needs with me.
- **Discrimination**: No discrimination or harassment will be tolerated in this class. If you believe you have been discriminated against, you are strongly encouraged to contact the Office of Discrimination and Harassment at 303.492.2127, or the Office of Student Conduct at 303.492.5550. Information about University policies and resources can be found at <a href="http://hr.colorado.edu/dh/">http://hr.colorado.edu/dh/</a>.

**Electronics**: Students are expected to turn **OFF** all electronic devices when entering the classroom, with the exception of personal computers—which are to be used only for course-related purposes.

- You should regularly check your CU email account for class announcements and information. You should also regularly check our Canvas course webpage to access reading assignments, to view paper assignments, and to view syllabus updates.
- You must bring either paper or electronic copies of each course reading with you to each class—you will <u>not</u> be permitted to use cell phones to access course material.
- Computer problems, broken printers, empty toner cartridges, or other technology problems will not
  excuse you from completing your assigned work on time or from bringing required materials to class.
- Students who must be reminded not to use personal electronics for non-course-related purposes will be prohibited from using electronics in class, and their participation grade will be penalized.

Honor Code: Students are responsible for knowing and adhering to the academic integrity policy of this institution. Violations may include cheating, plagiarism, aiding others in academic dishonesty, deception, fabrication, and etc. All incidents of academic misconduct will be reported to the Honor Code Council (<a href="https://nonewcolorado.edu">honor@colorado.edu</a>; 303.735.2273). Students found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including, but not limited to, university probation, suspension, or expulsion). Further details can be found at <a href="http://colorado.edu/policies/honor.html">http://colorado.edu/policies/honor.html</a>, and at <a href="http://honorcode.colorado.edu">http://honorcode.colorado.edu</a>.

**Plagiarism**: If students have *any* doubt about what constitutes plagiarism, it is their responsibility to ask *before* submitting work as their own.

Plagiarism is the act of using others' words and/or ideas without proper attribution, either intentionally or unintentionally. The *MLA Style Manual* (2nd edition) requires that

[s]cholarly authors generously acknowledge their debts to predecessors by carefully giving credit to each source. Whenever you draw on another's work, you must specify what you borrowed—whether facts, opinions, or quotations—and where you borrowed it from. Using another person's ideas without acknowledging the source constitutes plagiarism (Gibaldi 151).

Intentional plagiarism will be strictly punished: a proven first offense will result in an automatic F for the final assignment grade, while a proven second offense will result in an automatic F for the course. Moreover, depending on the nature of the offense, engaging in plagiarism may result in further disciplinary action by the University. Consult the PWR or Campus Honor Code websites for more info.

Further resources are available at <a href="https://levszentkiralyi.com/teaching/student\_resources/">https://levszentkiralyi.com/teaching/student\_resources/</a>, including

- Purdue Online Writing Lab: <a href="https://owl.english.purdue.edu/owl/section/2/9/">https://owl.english.purdue.edu/owl/section/2/9/</a>
- http://ucblibraries.colorado.edu/how/citationstyle.htm
- http://honorcode.colorado.edu/student-information
- http://colorado.edu/policies/honor.html
- See also Joseph Gibaldi, *MLA Style Manual and Guide to Scholarly Publishing*, 2nd ed. (New York: Modern Language Association, 1999).

**Punctuality**: persistent tardiness is unacceptable. With students who consistently arrive to class late, I reserve the right to count two late arrivals to class as one absence.

**Religious Observances**: Campus policy requires that faculty make every effort to reasonably and fairly accommodate students who have scheduling conflicts because of religious observances. Students who need to reschedule exams or assignments should inform me as soon as possible.

**Writing Center**: Students should consider utilizing the Writing Center—a campus service offering free one-on-one feedback about academic writing—as a supplement to their learning in this course. (See <a href="http://www.colorado.edu/pwr/writingcenter.html">http://www.colorado.edu/pwr/writingcenter.html</a> for more information about the Center or to schedule an appointment.) Note that the Center books up quickly, so plan accordingly.

**Written Work and Due Dates**: Students must type all writing assignments using 12-point font, 1-inch margins, and a consistent citation style (MLA, APA, or Chicago), and they must submit all assignments to our Canvas course dropbox by the assigned dates and times.

- Late work will be penalized one full letter grade (10%) for each day that it is late.
- If you require an extension, you will need to contact me at least 48 hours before the deadline to request an extension and your request must explain in detail why your circumstance warrants extra time to finish the assignment,
- A timely request for an extension does not guarantee that one will be provided: any decision to grant an extension will be made solely at my discretion.

### **Course Requirements**

#### • Paper 1: Conventions of Research and Writing Executive Summary (10% of final course grade):

- students will explore scholarship in their majors—identifying what counts as evidence within their respective fields of study, as well as some universal and discipline-specific conventions of research, analysis, and writing.
- 3-4 pages in length—single-spaced
- collaborative project

### • Paper 2: Literature Review for Research Project (20% of final course grade):

- students apply lessons on information literacy and demonstrate mastery of relevant literature and contemporary debates relating to their self-chosen research paper topic, as well as demonstrate how their own argument fits into and advances the scholarly conversation
- 5-6 pages in length—single-spaced
- students must submit both a rough draft and substantively revised final draft
- the rough draft will be peer-reviewed

### ■ **Paper 3: Research Project** (35% of final course grade):

- students write a research paper that develops an academic argument in defense of a thesis or hypothesis related to a subject of their choice—though, one that has preferably a subject in their major)—successfully applying principles of good writing, discipline-specific conventions of research and analysis, and general conventions of rhetorical analysis and information literacy
- 8-9 pages in length—single-spaced
- students must submit a rough draft, a substantively revised second draft, and a final draft
- both rough drafts will be peer-reviewed

#### • **Attendance** (10% of final course grade)

- <sup>n</sup> This is a discussion-based course in which students are expected to be actively involved in class discussions, workshops, and in-class assignments—making attendance a prerequisite.
- Students are permitted <u>2</u> unexcused absences without penalty. Each further unexcused absences will result in a 5% deduction to your attendance grade.
- NOTE: a generic slip provided by Wardenburg that notes that a student had an appointment on the day the student missed class will <u>not</u> be accepted as excusing the absence: students missing class due to illness must provide a note signed by or an email sent from their doctor explaining that the absence from class should be excused.
- NOTE: even when excused, more than 6 absences may result in an F for the course.

#### • **Course Participation** (10% of final course grade)

- This is a discussion-based course in which students are expected to be actively involved in class discussions, workshops, and in-class assignments.
- Arriving to class late, arriving unprepared to discuss the readings, neglecting to contribute substantively to our class discussions, demonstrating a lack of engagement, and failing to complete in-class assignments will all result in deductions in your course participation grade.
- Examples of behavior that indicates to me your lack of engagement: not taking notes; using cell phones during class; being generally disengaged (staring off into space, chatting with others, falling asleep, etc.); failing to make an effort to answer questions asked of you.
- Examples of behavior that indicates to me you are actively engagement: taking detailed notes (not just writing down what's provided on the slides); being generally engaged (active listening, making eye contact, responding to comments other students may make, etc.); making an effort to answer questions directly asked of you.

## • **Reading Comprehension Quizzes** (15% of final course grade)

- There will 6 unannounced quizzes over the course of the semester that will test students on specifics from the assigned readings and will ask students to apply course material learned earlier in the week.
- Quizzes will be completed in class and will consist in multiple choice and/or short answer questions.

#### Final class grades will be based on the following scale:

$$\geq$$
 93% = A 87 - 89% = B+ 77 - 79% = C+ 67 - 69% = D+ < 60% = F 90 - 92% = A- 83 - 86% = B 73 - 76% = C 63 - 66% = D 80 - 82% = B- 70 - 72% = C- 60 - 62% = D-

## **General Grading Guidelines for Research Paper Assignment:**

Further clarifying these general criteria, specific rubrics will be provided for each major writing assignment.

# An essay in the "A" Range will feature

- a strong thesis with a clear claim, reasons and evidence, and underlying warrant
- relevant and specific examples drawn from appropriate sources
- consistently clear analysis of reasons and evidence
- consistently appropriate and correct use of citation
- consistently clear and correct use of quotation, summary, and paraphrase
- careful attention to issues of grammar and style (especially sentence boundaries, clarity, coherence, and punctuation)
- meeting the minimum page requirements

# An essay in the "B" Range will feature

- a generally good thesis with a clear claim, reasons and evidence, and underlying warrant
- relevant and specific examples drawn from appropriate sources
- generally clear analysis of reasons and evidence
- generally appropriate and correct use of citation
- generally clear and correct use of quotation, summary, and paraphrase
- generally strong attention to issues of grammar and style
- meeting the minimum page requirements

# An essay in the "C" Range will feature

- a thesis lacking a clear claim, reasons, evidence, and/or underlying warrant
- poorly chosen and poorly explained examples
- little specific analysis of reasons and evidence (often as a result of a poor thesis)
- minimally appropriate and correct use of appropriate citation styles
- minimally clear and correct use of quotation, summary, and paraphrase
- minimal attention to issues of grammar and style
- failure to meet the minimum page requirements

### An essay in the "D" Range will feature

- no real thesis
- weak or no examples
- little or no analysis of reasons and evidence
- generally inappropriate or incorrect use of citation (but without lapsing into plagiarism)
- generally unclear or incorrect use of quotation, summary, and paraphrase
- significant problems with grammar and style
- failure to meet the minimum page requirements

# An essay in the "F" Range will feature

- no real thesis
- weak or no examples
- little or no analysis of reasons and evidence
- generally unclear and incorrect use of citation styles (often in ways that lapse into plagiarism)
- generally inappropriate or incorrect use of quotation, summary, and paraphrase
- significant problems with grammar and style
- failure to meet the minimum page requirements

# Note that this schedule is subject to revision

Details about how course readings and assignments satisfy CCHE guidelines are provided throughout. 1: Rhetorical Knowledge, 2: Writing Processes, 3: Writing Conventions, 4: Content Knowledge

# ISSUE-AREA 1: LONG-TERM, LOW-LEVEL EXPOSURE TO PESTICIDE RESIDUES IN FOODS

#### WEEK 1: INTERDISCIPLINARY NATURE OF ENVIRONMENTAL HEALTH RESEARCH

### Tuesday, 16 January: Course Introduction

- No reading assigned
- Class activity: "A Question of Environmental Racism in Flint," New York Times (21 Jan 2016)

# Thursday, 18 January: Science on Pesticide Exposure

■ Boobis et al., "Cumulative Risk Assessment of Pesticide Residues in Food" (2008)¹

<sup>1</sup> Purpose: critically analyze readings; CCHE Goals: 1, 4

#### WEEK 2: TYPES OF ARGUMENTS AND SCIENTIFIC RESEARCH AS EMPIRICAL

### Tuesday, 23 January: Science on Pesticide Exposure ■ Causal Arguments

- Ames et al., "Dietary Pesticides—99.99% All Natural" (1990) ¹
- Rulebook for Arguments, Chapter 52

<sup>1</sup> Purpose: critically analyze readings; CCHE Goals: 1, 4

<sup>1</sup>Purpose: review types of arguments and their purposes; CCHE Goals: 1, 2, 4

## Thursday, 25 January: Science on Pesticide Exposure • Conventions on Scientific Writing

- Lu et al., "Organic Diets Significantly Lower Children's Dietary Exposure to Pesticides" (2006)1
- Class activity: informal survey of conventions of research and writing in students' majors<sup>2</sup>
  - <sup>1</sup>Purpose: critically analyze readings, emphasis on role of counterarguments; CCHE Goals: 1, 4
  - <sup>2</sup> Purpose: critically reflect on discipline-specific conventions in one's major; CCHE Goals: 1, 3, 4

### WEEK 3: CONVENTIONS OF RESEARCH AND WRITING ACROSS THE DISCIPLINES

### Tuesday, 30 January: The Curriculum Vitae and CU Faculty Survey<sup>1</sup>

- No reading assigned
- Students receive directions for Paper 1<sup>2</sup>
- Class activity: survey a CU faculty member's CV and publishing history<sup>3</sup>

<sup>1</sup> Purpose: analyze the CV as a genre and identify leading journals in one's major; CCHE Goals: 1, 4 <sup>2</sup> Purpose: understand requirements of first major writing assignment; CCHE Goal: 2

<sup>3</sup> Purpose: make progress on Paper 1; CCHE Goals: 1, 2, 3, 4

### Thursday, 1 February: Policy Governing Pesticide Exposure • Discipline-Specific Conventions

- Percival et al. *Environmental Regulation*, Chapter 3 excerpt on Delaney Clause (2009)—only pp. 283-81
- Wargo, Our Children's Toxic Legacy, Chapter 7: Human Ecology of Pesticide Residues (1998)—only pp. 148-681
- Class activity: survey discipline-specific scholarship for conventions of research and writing<sup>2</sup>
  - <sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4
  - <sup>2</sup> Purpose: identify common and discipline-specific conventions in one's major; CCHE Goals: 1, 3, 4

### WEEK 4: PEER-REVIEW AND CRITERIA FOR QUALITY CONSTRUCTIVE FEEDBACK

### Tuesday, 6 February: Popularization of Science on Pesticide Exposure • Peer-Review Workshop

- The Blaze, "Yes, Pesticides Are In Everything, But You'll Never Guess the Source" (5 Jul 2017)¹
- Mother Jones, "Trump's EPA Just Greenlighted a Pesticide Known to Damage Kids' Brains (27 Mar 2017)1
- Sommers, "Responding to Student Writing" (1982)<sup>2</sup>
- Paper 1 draft due—upload to Canvas before class and each student should bring 1 hard copy to class
- Class activity: peer-review workshop of Paper 1 rough draft<sup>3</sup>
  - <sup>1</sup> Purpose: critically analyze reading, noting popularization of science; CCHE Goals: 1, 4
  - <sup>2</sup> Purpose: review how to provide helpful and constructive peer-review feedback; CCHE Goal: 4
    - <sup>3</sup> Purpose: engage in peer-review; CCHE Goal: 2

# Thursday, 8 February: Ethics of Pesticide Exposure - Sample Student Writing

- Lehman, "Values, Ethics, and the Use of Synthetic Pesticides in Agriculture" (1993)—only pp. 371-71
- Shrader-Frechette, *Taking Action, Saving Lives*, Chapter 4: Human Rights and Duties Not to Harm (2007)—only pp. 113-24, 141-8¹
- Class activity: critique student sample of Paper 13

<sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4 <sup>3</sup> Purpose: clarify expectations of first major writing assignment; CCHE Goals 2

# ISSUE-AREA 2: GROWING PREVALENCE OF INFECTIOUS DISEASES & EMERGING PANDEMICS

#### WEEK 5: WRITING AS EVIDENCE-BASED AND HOW WE KNOW WHAT WE KNOW

# Tuesday, 13 February: Science on Infectious Diseases • Thinking and Reasoning Scientifically

- Jones et al., "Global Trends in Emerging Infectious Diseases" (2008)¹
- Dewey, "Empirical and Scientific Thought" (1933), pp. 190-2022
  - <sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4
  - <sup>2</sup> Purpose: understand processes of induction, deduction, and scientific reasoning; CCHE Goals: 3, 4

### Thursday, 15 February: Science on Infectious Diseases • Drawing Inferences from Observations

- Rice et al., "Malnutrition as an Underlying Cause of Childhood Deaths Associated With Infectious Diseases in Developing Countries" (2000)<sup>1</sup>
- *Philosophy of Science*, Chapter 2: Scientific Inference<sup>2</sup>
- Paper 1 <u>final</u> draft must be uploaded to Canvas before class—<u>no</u> hard copy due<sup>3</sup>
  - <sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4
  - <sup>2</sup> Purpose: understand processes of drawing scientific inferences; CCHE Goals: 3, 4
    - <sup>3</sup> Purpose: complete first major writing assignment; CCHE Goals: 1, 2, 3, 4

#### WEEK 6: WRITING AS EVIDENCE-BASED AND HOW WE KNOW WHAT WE KNOW

# Tuesday, 20 February: Policy Governing Infectious Diseases • The Realist Debate

- Aginam, "International Law and Communicable Diseases" (2002)¹
- Gostin et al., "The Law and the Public's Health: A Study of Infectious Disease Law in the United States" (1999)—only Section 4: Current Status of State Public Health Law<sup>1</sup>
- Philosophy of Science, Chapter 4: Realism and Anti-Realism<sup>2</sup>
  - <sup>1</sup> Purpose: critically analyze reading: CCHE Goals: 1, 4
- <sup>2</sup> Purpose: understand the intuition behind and limitations of truth as correspondence; CCHE Goals: 3, 4

#### WEEK 6 CONTINUED...

# Thursday, 22 February: Ethics on Infectious Diseases • Scientific Explanations

- Smith et al., "Are There Characteristics of Infectious Diseases That Raise Special Ethical Issues?" (2004)1
- *Philosophy of Science*, Chapter 3: Explanation in Science<sup>2</sup>

<sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4

<sup>2</sup> Purpose: understand components of conventional explanations of science; CCHE Goals: 1, 3

#### WEEK 7: WRITING AS CONTEXT DEPENDENT

# Tuesday, 27 February: Heeding the Rhetorical Situation

- PWR, Knowing Words, Chapter 3: Rhetoric and Rhetorical Analysis (2017)—only pp.25-33¹
- Hardin, "Lifeboat Ethics" (1974)<sup>2</sup>
- Students receive directions for Papers 2 and 3<sup>3</sup>

<sup>1</sup> Purpose: review rhetorical situation and rhetorical appeals; CCHE Goals: 1, 3, 4

<sup>2</sup> Purpose: critically analyze reading, emphasis on audience and rhetorical appeals; CCHE Goals: 1, 2, 4

<sup>3</sup> Purpose: understand requirements of this course's overarching research project; CCHE Goal: 2

# Thursday, 1 March: Writing for Academic Audiences • Generalizations

- Bartholomae, "Inventing the University" (1985)—only pp. 8-201
- Rulebook for Arguments, Chapter 2: Generalizations<sup>2</sup> and Appendix I: Some Common Fallacies<sup>1</sup>
- Class activity: students workshop possible topics of interest for the research project<sup>3</sup>

<sup>1</sup> Purpose: review rhetorical situation and satisfying conventions of academic writing; CCHE Goals: 1, 3, 4

<sup>2</sup> Purpose: review types of arguments and their purposes; CCHE Goals: 1, 2, 4

<sup>3</sup> Purpose: make progress on research project; CCHE Goals: 1, 3

### GENERATING AN ORIGINAL RESEARCH PAPER

### WEEK 8: STARTING YOUR RESEARCH PROJECT

# Tuesday, 6 March: Information Literacy • "Un-Research" Writing Workshop

- Rulebook for Arguments, Chapter 4: Sources¹
- Hosier, "Teaching Information Literacy Through Un-Research" (2015)<sup>2</sup>
- Class activities: review library and online databases<sup>1</sup>, pre-research writing exercise<sup>2</sup>

<sup>1</sup> Purpose: reiterate where to find and how to evaluate academic sources; CCHE Goal: 2 <sup>2</sup> Purpose: learn value of articulating one's argument before reviewing literature; CCHE Goals: 1, 2, 3, 4

### Thursday, 8 March: Literature Reviews v. Annotated Bibliographies • Grammar Workshop 1

- Knopf, "Doing a Literature Review" (2006) 1
- Class activity: grammar and style workshop 1<sup>2</sup>
- Class activity: students brainstorm possible theses/hypotheses for Paper 3 and finalize topic proposals<sup>3</sup>
- <sup>1</sup> Purpose: understand elements of literature reviews and how to synthesize research; CCHE Goals: 2, 3, 4
  - <sup>2</sup> Purpose: rhetorical grammar, review punctuation and sentence components; CCHE Goal: 3
    - <sup>3</sup> Purpose: make progress on research project; CCHE Goals: 1, 3

### WEEK 9: IMPLEMENTING DISCIPLINE-SPECIFIC CONVENTIONS OF WRITING

# Tuesday, 13 March: Scientific Writing for Scientific Audiences • Writing Workshop

- Gopen and Swan, "The Science of Scientific Writing" (1990)1
- Class activity: writing workshop and small-group conferencing—ATTENDANCE IS REQUIRED<sup>2</sup>
  - <sup>1</sup> Purpose: understand (problematic) conventions of scientific writing; CCHE Goals: 1, 3, 4 <sup>2</sup> Purpose: discuss working draft and make progress on Paper 2; CCHE Goals: 1, 2, 3, 4

# Thursday, 15 March: Scientific Writing for Scientific Audiences • Peer-Review

- Sollaci et al., "The IMRAD Structure: A Fifty-Year Survey" (2004)¹
- Paper 2 draft due—upload to Canvas before class and bring one hard copy to class
- Class activity: peer-review workshop of Paper 2<sup>2</sup>

<sup>1</sup> Purpose: understand conventions of scientific writing; CCHE Goals: 1, 3, 4 <sup>2</sup> Purpose: engage in peer review; CCHE Goal: 2

## ISSUE-AREA 3: ROLE OF SCIENCE IN ENVIRONMENTAL HEALTH POLICY DECISIONS

#### WEEK 10: CORPORATE SPECIAL INTERESTS AND THE REVISION PROCESS

### Tuesday, 20 March: Revision Process Revisited • Rules of Citation

- Meyer and Smith, *The Practical Tutor*, Chapter 2: Engaging in Dialogue (1987)<sup>1</sup>
- Sommers, "Revision Strategies of Student Writers and Experienced Adult Writers" (1980)<sup>1</sup>
- Class activity: review rules of citation<sup>2</sup>
  - <sup>1</sup> Purpose: understand that writing is a cyclical and critically self-reflective process; CCHE Goals: 2, 4 <sup>2</sup> Purpose: review summary, paraphrase, quotation, citation, and source information; CCHE Goal: 3

### Thursday, 22 March: Political Economy of Environmental Health Policy • Paper Outline

- Dauvergne, *Shadows of Consumption*, Chapter 8: Lead Must Go (2010)¹
- Paper 2 <u>final</u> draft must be uploaded to Canvas before class—<u>no</u> hard copy due<sup>2</sup>
- Class activity: drawing on their literature reviews, students begin writing detailed paper outlines<sup>4</sup>
  - <sup>1</sup> Purpose: critically analyze readings; CCHE Goals: 1, 4
  - <sup>2</sup> Purpose: complete second writing assignment; CCHE Goals: 1, 2, 3, 4
  - $^4\,\mbox{Purpose}$  : begin organizing the course's overarching research paper; CCHE Goals: 2, 4

# WEEK 11: SPRING BREAK Tuesday, 27 March and Thursday, 29 March

# WEEK 12: SCIENCE AS IMPARTIAL & OBJECTIVE (?) AND DRAFTING THE RESEARCH PAPER

# Tuesday, 3 April: "Privatized" v. Objective Science • Writing Workshop

- Pielke, "When Scientists Politicize Science" (2006)¹
- Shrader-Frechette, *Taking Action, Saving Lives*, Chapter 3: Private Science, Public Inquiry (2007)—only pp. 91-112, *and just skim these pages*<sup>1</sup>
- Class activity: writing workshop and small-group conferencing—ATTENDANCE IS REQUIRED<sup>2</sup>
  - <sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 3, 4
  - <sup>2</sup> Purpose: discuss working draft and make progress on Paper 3; CCHE Goals: 1, 2, 3, 4

#### WEEK 12 CONTINUED...

# Thursday, 5 April: Scientific Uncertainty • NCAR Guest Speaker

- Cranor, "Public Health Research and Uncertainty (1994)—only pp. 169-791
- Class activity: workshop thesis statement or hypothesis for Paper 3<sup>2</sup>

<sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 3, 4 <sup>2</sup> Purpose: make progress on Paper 3; CCHE Goals: 1, 3

#### WEEK 13: THE PUBLIC'S ROLE AND DRAFTING THE RESEARCH PAPER

# Tuesday, 10 April: Public Perceptions of Risk - Academic Argumentation Revisited

- Sunstein, Laws of Fear: Beyond the Precautionary Principle, Chapter 4: Fear As Wildfire (2005)<sup>1</sup>
- Rulebook for Arguments, Chapter 7: Extended Arguments<sup>2</sup>

<sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4 <sup>2</sup> Purpose: review nature of academic argumentation; CCHE Goals: 1, 2, 3, 4

## Thursday, 12 April: Responsibilities of the Public Citizen • Academic Argumentation Revisited

- Shrader-Frechette, *Taking Action, Saving Lives*, Chapter 6: Where We Go From Here (2007)—only pp. 197-207¹
- Rulebook for Arguments, Chapter 8: Argumentative Essays<sup>2</sup>
- Class activity: writing workshop—revisit logical fallacies<sup>2</sup>

<sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4
 <sup>2</sup> Purpose: review nature of academic argumentation; CCHE Goals: 1, 2, 3, 4
 <sup>2</sup> Purpose: make progress on Paper 3; CCHE Goals: 1, 3

# ISSUE-AREA 4: TO BE DETERMINED BY CLASS

#### WEEK 14: : ISSUE-AREA 4 AND IDENTIFYING SENTENCE-LEVEL PROBLEMS

#### Tuesday, 17 April: Science on Issue-Area 4

- Readings to be determined<sup>1</sup>
- Paper 3 rough draft #1 must be uploaded to Canvas before class—no hard copy due

<sup>1</sup>Purpose: critically analyze readings; CCHE Goals: 1, 4

### Thursday, 19 April: Policy Governing Issue-Area 4 • Grammar Workshop 2

- Readings to be determined<sup>1</sup>
- Class activity: grammar and style workshop 2<sup>2</sup>

<sup>1</sup> Purpose: critically analyze readings; CCHE Goals: 1, 4 <sup>2</sup> Purpose: understand notions of concision, parallelism, and precision; CCHE Goals: 1, 3

#### WEEK 15: ISSUE-AREA 4 AND REVISING THE RESEARCH PAPER

# Tuesday, 24 April: Ethics on Issue-Area 4 • Writing Workshop

- Readings to be determined<sup>1</sup>
- Class activity: explore the normative implications of one's research project<sup>2</sup>
- Class activity: review characteristics of quality comments<sup>3</sup>

<sup>1</sup> Purpose: critically analyze readings; CCHE Goals: 1, 4

<sup>2</sup> Purpose: reiterate that empirical research is grounded in value judgments; CCHE Goals: 1, 4

<sup>2</sup> Purpose: reiterate that peer-review process requires giving high quality comments; CCHE Goals: 2, 4

#### WEEK 15 CONTINUED...

# Thursday, 26 April: Peer-Review #1

- No readings assigned.
- Paper 3 revised draft #2 must be uploaded to Canvas before class, and bring one hard copy to class
- Class activity: peer-review workshop of working draft of research project<sup>2</sup>

<sup>1</sup> Purpose: engage in peer review; CCHE Goals: 1, 2, 4

### WEEK 16: ETHICAL ASPECTS OF WRITING AND FINALIZING THE RESEARCH PAPER

# Tuesday, 1 May: Knowledge, Power, Accountability—Duties of the Educated • Writing Workshop

- President Kennedy, "Responsibilities of Education Citizens" (18 May 1963)¹
- Plato, *The Republic*, Book VII excerpt on the "Allegory of the Cave" (1987 [380 BCE])¹
- Students must bring one hard copy of only the conclusion of their research project
- Class activity: further explore the implications of one's research project and revise one's conclusion<sup>2</sup>
  - <sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 4
- <sup>2</sup> Purpose: consider broader implications of our writing and responsibilities as writers; CCHE Goals: 1, 4

# Thursday, 3 May: Knowledge, Power, Accountability—Duties of Scientists • Peer-Review #2

- Haerlin and Parr, "How To Restore Public Trust in Science" (1999)¹
- Bird, "Socially Responsible Science Is More than 'Good Science'," (2014)¹
- Pain, "The Social Responsibilities of Scientists" (16 Feb. 2013)¹
- Paper 3 revised draft #3 must be uploaded to Canvas before class, and bring one hard copy to class
- Class activity: second peer-review workshop of working draft of research project<sup>2</sup>
  - <sup>1</sup> Purpose: critically analyze reading; CCHE Goals: 1, 3, 4 <sup>2</sup> Purpose: engage in peer review; CCHE Goals: 1, 2, 4

### **FINALS WEEK**

### No final exam is scheduled—our class does not meet during finals week

Paper 3 final draft must be uploaded to Canvas by Monday, May 7th at 4:30pm—no hard copy required1

<sup>1</sup> Purpose: complete third writing assignment; CCHE Goals: 1, 2, 3, 4