A Republic of Science

The English word *science* comes from the Latin *scientia*, which means “knowledge.” But can any body of knowledge, any collection of information, be considered a science? Who decides what counts as real science, and on what authority? Is the *scientific community* a group of experts who are separate from and superior to the general public, or can this term refer to any society based on rational ideals? How can non-scientists intelligently evaluate political claims expressed in scientific rhetoric? In this writing seminar, examination of the concept of science will lead us to explore relations between objectivity, culture, and ethics. We will begin with Plato’s *Republic*, a text that tries to imagine a completely rational society. Next, we will assess competing accounts about the nature of legitimate science. In the third unit we will analyze the tensions inherent in a *scientific community* more closely, and ask whether resistance against science is an important feature of democracy or a dangerous exercise of anti-intellectualism. Finally, we will investigate how scientific rhetoric is used to justify certain normative claims, especially within the contemporary discussions of homosexuality.

English 114 is, above all, about writing—your writing. Drafting and revising four major papers will help you prepare for the challenges you will face as you take classes in a range of disciplines. Emphasizing academic analysis and argumentation, we focus specifically on four elements of a successful argument: problem, claim, evidence, and motive. Revision—not just the correction of errors, but the process of seeing an argument from a new perspective and writing a relatively new paper—is also a prominent feature of this course. The readings and the writing assignments take you through the steps involved in successful academic argumentation: identifying difficult questions that result in papers worth reading, evaluating and integrating sources, organizing the presentation of thoughtful claims, and developing an effective style in which to convey them.

**Texts**

Available via the Yale Bookstore, 77 Broadway Avenue:
- Graff & Birkenstein, *They Say, I Say: The Moves That Matter in Academic Writing*
- Hacker, *A Pocket Style Manual*
- Warner, *The Trouble with Normal*

Other readings are available online via classesv2.yale.edu and at Tyco Copy, 262 Elm St.

**Make sure to bring a paper copy of the appropriate reading(s) to each class.**

**Requirements**

- **PARTICIPATION.** Attendance at all course meetings is required. More than two unexcused absences will obliterate your participation grade; more than four will result in an invitation to withdraw from the course. Of course, attendance means more than showing up to class on time. You are expected to come fully prepared for each meeting by having read and thought about the material assigned for that day.
- **DEBATE.** In addition to our normally vigorous class discussions that may extemporaneously take the form of rhetorical disputation, there will be two formal class-wide debates. You will
be divided among two teams whose task will be to affirm or disaffirm a particular resolution that is related to the day's reading assignment. Representatives from each team will present arguments for and against their side, and time will be given for cross-examination sessions. After the debate, you will compose a brief written reflection to be submitted in the following class. Together these debates will constitute half of your final participation grade.

- **FOUR FORMAL PAPERS.** The first three must be submitted in draft and fully revised versions. The first is a close reading of a passage; the second, an argument using several sources; the third, an extended researched argument; the fourth, a scholarly review of research.

### Grading

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<td>#1 (4 pgs)</td>
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### Guidelines

- **LAPTOP USE.** To minimize distraction, the use of laptop computers, tablets, smart-phones, or other electronic devices is not permitted in class.
- **FORMATTING.** Papers should be double-spaced and typed in a legible 12-point font with one-inch margins. Please include page numbers and your name on every page as well.
- **ACADEMIC HONESTY.** Plagiarism is a serious offense whether or not it is deliberate and is severely sanctioned at Yale (see: yalecollege.yale.edu/content/cheating-plagiarism-and-documentation). If you feel any uncertainty about what you are doing, do not hesitate to ask questions. A guide to avoiding plagiarism by employing appropriate sourcing and citation is available from the Writing Center (writing.yalecollege.yale.edu/using-sources).
- **LATE WORK.** Assignments will specify how they must be submitted (class or Drop Box) and when. Late assignments will lose one-third of a grade (e.g. B+ to B) each day they are late.
- **GETTING ASSISTANCE.** I am happy to meet with you individually to discuss any course-related issues or questions; either drop in during my weekly office hours or contact me to schedule an appointment for another time. Additionally, I can answer questions by email. You should expect a response within about a day.

### Writing Resources

- **WRITING TUTORS** work one-on-one with students in every college. Their schedules fill up very quickly in the fall, so make an appointment as soon as possible and get to know them. writing.yalecollege.yale.edu/residential-college-writing-tutors
- **WRITING PARTNERS** provide drop-in assistance during weekday afternoons and evenings. Unlike writing tutors, they do not read papers in advance. writing.yalecollege.yale.edu/writing-partners
- **MLA and CHICAGO** are the primary citation styles employed in academic writing in the humanities, and are the standard used in this course. Choose one, and be consistent. The Hacker text provides guidelines for each style.
- **YALE’S WRITING CENTER** offers general guidance for writing papers and is available online: writing.yalecollege.yale.edu/advice-students
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<th>Date</th>
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<tr>
<td>1/17</td>
<td>T</td>
<td>Introduction</td>
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| 1/19  | Th.   | Plato, *The Republic*, selections from bks. 7 & 10  
*They Say/I Say*, Introduction and Chapter 1 |
| 1/24  | T     | Plato (continued)  
*They Say/I Say*, Chapters 2-3 |
| 1/26  | Th.   | Popper, “Science: Conjectures and Refutations”  
Thagard, “Why Astrology Is a Pseudoscience”  |
| 1/27  | F     | **Essay #1 draft due**                                                             |
| 1/31  | T     | Essay #1 Writing Workshop  
*They Say/I Say*, Chapters 12-14 |
| 2/2   | Th.   | Hempel, “Studies in the Logic of Explanation”                                     |
| 2/7   | T     | Cartwright, “The Truth Doesn’t Explain Much”  
**Essay #1 revision due** |
| 2/9   | Th.   | Carnap, “The Nature of Theories”  
*They Say/I Say*, Chapters 4-5 |
| 2/14  | T     | Putnam, “What Theories Are Not”  
**Essay #2 draft due** |
| 2/16  | Th.   | **CLASS DEBATE: Feyerabend**                                                     |
| 2/21  | T     | Essay #2 Writing Workshop  
*They Say/I Say*, Chapters 6-7 |
| 2/23  | Th.   | Rudner, “The Scientist Qua Scientist Makes Value Judgments”  
*They Say/I Say*, Chapters 8-9 |
| 2/28  | T     | Hempel, “Science and Human Values”  
**Essay #2 revision due** |
| 3/2   | Th.   | Hollinger, “From Weber to Habermas”  
*They Say/I Say*, Chapter 10 |
<p>| 3/3   | F     | <strong>Essay #3 proposal and working bibliography due</strong>                                |</p>
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| T 3/7  | Giere, “The Feminist Question in the Philosophy of Science”  
**They Say/I Say**, Chapter 11 |
| Th. 3/9 | [LIBRARY SESSION] |
| Th. 3/30 | Canguilhem, “Norm and Average”  
**They Say/I Say**, Chapter 15, 16, or 17 |
| F 3/31 | **Essay #3 annotated bibliography and partial draft due** |
| T 4/4  | Essay #3 Writing Workshop  
**FILM SCREENING**: “The Masterpiece Society” (1992) |
| Th. 4/6 | **CLASS DEBATE**: Canguilhem and “The Masterpiece Society” |
| T 4/11  | Heidegger, “Plato’s Doctrine of Truth”  
**Essay #3 full draft due** |
| Th. 4/13 | Heidegger (continued) |
| Th. 4/20 | Warner (continued)  
**Essay #3 revision due** |
| T 4/25  | Sedgwick, “How To Bring Your Kids Up Gay”  
**FILM SCREENING**: “The Outcast” (1992) |
| Th. 4/27 | Arana, “My So-Called Ex-Gay Life” |
| Th. 5/4 | **Essay #4 due** |