COURSE DESCRIPTION
This course employs an exciting approach to learning called Reacting to the Past. Reacting courses consist of elaborate games, set in the past, in which students are assigned roles informed by historical texts, emerging scientific discoveries, and geographic locations in London. In this class, you will learn to construct arguments from these texts and then support your positions through reasoned, sometimes impassioned, writing and speeches. As you take control of an unfolding historical drama and struggle for your characters to prevail; you will become deeply engaged, both intellectually and emotionally, with the subject matter. I will act as the gamemaster, determining your roles, preparing you to play, grading your work, and occasionally nudging the games as they develop.

We will be playing two games over the four-week program. The London 1854: Cesspits, Cholera, and Conflict over the Broad Street Pump game immerses students in the scientific debates and methodologies that led to the founding of the modern fields of microbiology and epidemiology in the mid-to-late 1800’s. The goal of Acid Rain in Europe 1979-1984 is to introduce students to a complex issue of environmental science, specifically acid precipitation, in the context of the economic, political, social, and philosophical factors that come into play in the effort to protect the environment. Both games highlight how groups can deny or misinterpret scientific evidence and construct alternative interpretations due to an external motive. Each game is described in more detail below.

London 1854: Cesspits, Cholera, and Conflict over the Broad Street Pump takes place on the evening of September 7, 1854 at Vestry Hall in Soho, Greater London. You are a member of a special emergency response committee of the local Board of Governors and Directors of the Poor of St. James Parish, who have convened to respond to the deadly outbreak of Cholera that has claimed the lives of more than 500 parish residents over the preceding eight days. Historically, the outcome of this meeting was the decision to remove the pump handle from a contaminated neighborhood pump on Broad Street. This decision and the events leading up to it are considered a defining moment in the development of modern approaches to public health, epidemiology and municipal waste management. This role play is designed to highlight various aspects of the historical debate. We will have an opportunity to visit the Broad Street Pump to place your learning in context of the location.
**Acid Rain in Europe 1979-1989** covers a ten-year period in which the nations of Europe formulated and expanded the Long Range Transport Air Pollution Treaty (LRTAP). This treaty continues to be expanded and is a model for regional cooperation on environmental issues. However, the road to this treaty was not smooth. The game consists of three of the negotiating settings that represented critical junctures. The game begins in 1979 at the Geneva, Switzerland UNEC meeting. This meeting led to a treaty with no specific goals and no enforcement. It did provide money for research that showed the extent of the problem and provided the scientific data to support a stronger treaty. The second section of the game is the Helsinki, Finland meeting in 1984 at which binding limits were finally included in the treaty. The final session in Sophia, Bulgaria expanded the treaty beyond sulfur dioxide pollution and included nitrogen oxide pollution as well. The game is designed to include as many of the pressures and political forces at work in Europe at this time and will often lead to an outcome similar to the actual historical one. However, this is by no means guaranteed. Excursions will allow us to explore the local impacts of pollution (and climate change).

**COURSE GOALS**

Students will

1. Explore ways in which historical scientific issues are connected to contemporary discoveries with connections to the Contemporary Issues in Science course.
2. Understand the complexity of communicating and understanding ways that scientific discoveries intersect with human public health and public policy.

**COURSE OBJECTIVES**

This course meets Core Education Area of Inquiry for Social Sciences (SSC, Group 2)

This course will improve your ability to…

1. Speak and write clearly, analytically, and persuasively.
2. Read complicated texts and critically evaluate their arguments and evidence.
3. Lead discussions, conduct negotiations, and work in teams to solve problems in a climate of rival interests, irreconcilable values, and incomplete information.
4. Analyze—through simulated firsthand experience—the extent to which individuals and groups can affect the course of history.
5. Write about scientists who are researching topics related to our course.

**Learning objectives for London 1854: Cesspits, Cholera, and Conflict over the Broad Street Pump**

Students will be able to…

1. Identify the source of disease outbreak and transmission.
2. Reflect on scientific debates and methodologies that led to the founding of the modern fields of microbiology and epidemiology.
3. Justify an appropriate public health response to deal with an emerging crisis.

**Learning objectives for Acid Rain in Europe 1979-1989**

Students will be able to…

1. Identify ecosystem linkages and explain how damage to any part damages the whole.
2. Interpret results of acid forming pollution and system results.
3. Evaluate relevance for international pollution control debates (including climate change negotiations).
4. Reflect on ways in which people relate to the environment and economic factors that policy makers must consider in forming environmental policy.

INSTRUCTIONAL METHODOLOGY
As your instructor, my priority is to create a learning environment where you each feel a sense of belonging, are challenged, explore new topics and a new city, and build connections. Reacting to the Past relies on deep student engagement. I am here as your teacher, coach, and gamemaster and guide to set each of you up for success in your understanding of the content and playing the game. In preparation we will read materials, visit sites of historical and scientific relevance, and discuss key scientific content. To meet the course objectives you will write essays, give speeches, prepare for gameplay, learn about scientists, and write reflections. During the game play, I will be watching your interactions, providing feedback, passing notes, and supporting your work to stay in character to achieve your objectives.

Talking with my students about our course material is a true pleasure—confused or excited about something related to the games or your time in London? Wondering how what we’re learning relates to current events, career choices, or other courses you can take UO? Please be in touch! Please also be in touch to tell me how you are doing in the course. If you are having trouble with some aspect of it, I would like to strategize with you. I believe every student can succeed in this course, and I care about your success.

COURSE AND PROFESSIONAL PARTICIPATION
Course Participation and Professionalism Participation includes class attendance, reading assigned materials, overall preparation for class, and actively contributing. Class will start promptly at the designated time. You are expected to be on time, attend all classes and site visits, and remain in the classroom for the duration of the class. Your involvement during class is critical to the exchange of ideas and fruitful discussions especially during game play.

Preparation, professionalism, and mutual respect are all important elements of your participation score. Professional behavior is expected at all times. While in London, students should think of themselves as American Ambassadors. Everything you say and do should reflect well on yourself, America, and the GEO program. Right along with that is respect for the British culture and way of life. We are guests here.

Inclusiveness Open inquiry, freedom of expression, and respect for difference are fundamental to a comprehensive and dynamic education. We are committed to upholding these ideals by encouraging the exploration, engagement, and expression of divergent perspectives and diverse identities.

Attendance While students are here in London to experience the UK, attendance in class is critical. Refer to the attendance policy you received during orientation for more details. No make-up assignments are available for unexcused absences.

METHOD OF EVALUATION (GRADING POLICIES)
<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Cholera Game</td>
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<tr>
<td>Preparation Assessment</td>
<td>5%</td>
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<tr>
<td>Essay</td>
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<tr>
<td>Speech</td>
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<tr>
<td>Participation and Excursions</td>
<td>10%</td>
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<tr>
<td>Scientist Spotlight</td>
<td>5%</td>
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<tr>
<td>Sulfur Dioxide Game</td>
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<tr>
<td>Preparation Assessment</td>
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<tr>
<td>Scientist Spotlight</td>
<td>5%</td>
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<tr>
<td>Final Reflection</td>
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The preparation assessments measure your understanding of the background readings and science that we will be studying during the preparation for each game.

The essays you are responsible for depend on your role; more guidance will be given in class, on Canvas, and on role sheets. Most will take the form of short speeches or position papers taking a particular stance on a given issue. While papers need not (and probably should not) be written in traditional academic style, they should still cite evidence consistent with your character, make logical arguments, consider the views of others, and exhibit good style and perfect grammar and spelling. All papers must include proper citations for references and material that you learned from a source that you have read. Need a refresher on how to do this? Please ask! Great online resource is on the Purdue Owl site. Exact paper length is up to you and will depend on your speech timing. A rubric for the grading of the papers is provided on Canvas with more instructions.

You will also present the content of your papers as speeches in class. These should match the content of your papers but you should aim to not simply read your essay. Your speeches will be assessed based on the elements of good presentation as discussed in class and defined in the rubrics. Before class you should post each of your papers on Canvas so they can be graded and shared with the rest of the class to give your classmates a record of what your character has argued. More instructions will be provided. Clearly indicate your name, your role, and the topic of each paper within the body of the submission.

The participation and excursion component of your grade is based on how successfully you play your assigned role, but also on how faithfully you do so. Do not be tempted into being untrue to your character purely to advance your victory objectives. Being engaged on the excursions and linking excursion opportunities to course materials is encouraged and will be rewarded. In determining your class participation grade, I’ll pay close attention to a number of factors: the quality and quantity of your public statements during open discussions and faction meetings, your ability to make alliances—and handle disagreements—with other players, and the depth of your engagement with course readings and excursions. Lastly, you may be rewarded for winning the game and achieving your victory objectives, but this is a small component of the participation grade since the game is to some extent biased toward certain outcomes. As a practical matter I maintain a log with a record of each student’s
participation. I also keep track of what students are doing outside of class in preparation for the game.

**Class attendance is required.** The games simply will not function in your absence. You will not be able to properly play your roles without attending the pre-game sessions. Missing two sessions of the games themselves without a valid excuse will result in failure for the course.

For **scientist spotlights** you will watch a video, read an interview, or listen to a radio story about a scientist who has researched the topics we'll be learning about in class. These are an opportunity to meet the real people behind the work, explore contemporary scientific discoveries related to the games, and learn about their work in the scientists own words.

**Final Reflection** throughout the course you have read, written, given speeches, talked to your classmates, and explored a new city. We want you to reflect on what have you learned. What has surprised you? What has excited you? Prompts will be given to guide your reflection.

**A NOTE ABOUT WORKLOAD**
The readings at the beginning of each game are difficult by design, intended to familiarize you very rapidly with complex historical, political, and scientific dilemmas. Don’t be alarmed or discouraged; this is part of the plan. Nor should you be fooled by the absence of reading assignments in the weeks when the game is being played. During this time, you will be frantically caucusing with other members of your factions (both online and in person), drafting speeches and writing assignments using arguments derived from course texts, rebutting and co-opting your fellow students’ own speeches and writings, and repeatedly delving back into the course material to fashion new arguments and develop an ever deeper understanding of the issues. Many students become so immersed in their roles that they devote extra time to the course over and above the formal requirements. Don’t hesitate to get involved in this way—it’s part of what Reacting is all about—but don’t let other obligations fall by the wayside nor let it limit your experiences in London!

**COURSE OUTLINE**

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<tr>
<th>Week</th>
<th>Topic and Learning Objectives</th>
<th>Readings and Assignments</th>
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| 1    | **Preparation for London 1854: Cesspits, Cholera and Conflict over the Broad Street Pump** (10 class hours)  
*Identify key contributing factors of the cholera conflict  
*Prepare for gameplay  
*Reflect on connections between field trips, readings, and discussions  
*Examine current scientific perspectives | **Cholera** Gamebook  
Epidemiology Readings  
Preparation Assessment  
Scientist Spotlight  
Participation and Excursion |
| 2    | **Game play of London 1854: Cesspits, Cholera and Conflict over the Broad Street Pump.** (10 hours)  
*Play role as assigned to meet character’s objectives | **Cholera** Role essay  
Role speech  
Participation and Excursion |
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<tbody>
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<td></td>
<td>*Prepare essay and speech based on character’s historical and scientific understanding of the topics</td>
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</table>
| 3 | **Preparation for** *Acid Rain in Europe 1979-1989.* (10 hours) | **Acid Rain** Gamebook  
Pollution Readings  
Preparation Assessment  
Scientist Spotlight  
Participation and Excursion |
|   | *Identify key contributing factors of the pollution discussions*  
*Prepare for gameplay*  
*Reflect on connections between field trips, readings, and discussions*  
*Examine current scientific perspectives* |   |
| 4 | **Game play of** *Acid Rain in Europe 1979-1989.* (10 hours) | **Acid Rain** Role essay  
Role speech  
Participation and Excursion  
**Final Reflection** |
|   | *Play role as assigned to meet character’s objectives*  
*Prepare essay and speech based on character’s historical and scientific understanding of the topics*  
*Reflect on experiences* |   |

**MATERIALS AND RESOURCES**

We will use Canvas as the primary location for resources sharing, assignment submission, and communicating about grades. We will have a Slack site for communication between characters during the games.

**COURSE READINGS**


Additional readings available for Role sheets and in gamebook to supplement preparation.

**CLASSROOM BEHAVIORS**

All members of the class (both students and instructor(s)) can expect to:

1. Participate and Contribute: Students are expected to participate by sharing ideas and contributing to the collective learning environment. This entails preparing, following instructions, and engaging respectfully and thoughtfully with others. Together, we will establish more specific participation guidelines and criteria for contributions.

2. Expect and Respect Diversity: All classes at the University of Oregon welcome and respect diverse experiences, perspectives, and approaches. What is not welcome are behaviors or contributions that undermine, demean, or marginalize others based on race, ethnicity, gender, sex, age, sexual orientation, religion, ability, or socioeconomic status. We will value differences and communicate disagreements with respect. We may establish more specific guidelines and protocols to ensure inclusion and equity for all members of our learning community.

3. Help Everyone Learn: Our goal is to learn together by learning from one another. As we move forward learning during this challenging time, it is important that we work together and build on our strengths. We are returning with a range of feelings about
and comfort with being in person, and this means we need to be patient with each other, identify ways we can assist others, and be open-minded to receiving help and feedback from others. No one should hesitate to contact me to ask for assistance or offer suggestions that might help us learn better.

**Academic Integrity**

You are expected to do your own work. You are encouraged to discuss ideas with each other and to study together, but don’t copy someone else’s work and don’t allow someone else to copy your work. By submitting an essay or other work, you are certifying that you are the student entitled to log in using a specific set of credentials. All students are expected to conform to the student conduct code (http://integrity.uoregon.edu/); students not in compliance will be brought to the attention of the university and risk removal from the program.

**Accessible Education**

Please let me know within the first week of the term if you need assistance to fully participate in the course. Participation includes access to lectures, web-based information, in-class activities, and exams. The Accessible Education Center (http://aec.uoregon.edu/) works with students to provide an instructor notification letter that outlines accommodations and adjustments to class design that will enable better access. Contact the Accessible Education Center for assistance with access or disability-related questions or concerns.

If you are not a student with a documented disability through AEC, but you would like for me to know about class issues that will impact your ability to learn, I encourage you to come visit with during office hours so that we can strategize how you can get the most out of this course.

**Reporting Obligations**

I am a student-directed employee. For information about my reporting obligations as an employee, please see [Employee Reporting Obligations](http://integrity.uoregon.edu/) on the Office of Investigations and Civil Rights Compliance (OICRC) website. Students experiencing any form of prohibited discrimination or harassment, including sex or gender-based violence, may seek information and resources at [safe.uoregon.edu](http://safe.uoregon.edu), [respect.uoregon.edu](http://respect.uoregon.edu), or [investigations.uoregon.edu](http://investigations.uoregon.edu) or contact the non-confidential Title IX office/Office of Civil Rights Compliance (541-346-3123), or Dean of Students offices (541-346-3216), or call the 24-7 hotline 541-346-SAFE for help. I am also a mandatory reporter of child abuse. Please find more information at [Mandatory Reporting of Child Abuse and Neglect](http://integrity.uoregon.edu/).

**Academic Disruption due to Campus Emergency**

In the event of a campus emergency that disrupts academic activities, course requirements, deadlines, and grading percentages are subject to change. Information about changes in this course will be communicated as soon as possible by email, and on Canvas. If we are not able to meet face-to-face, students should immediately log onto Canvas and read any announcements and/or access alternative assignments. Students are also expected to continue coursework as outlined in this syllabus or other instructions on Canvas.

**Accommodation for Religious Observances**
The university makes reasonable accommodations, upon request, for students who are unable to attend a class for religious obligations or observance reasons, in accordance with the university discrimination policy which says “Any student who, because of religious beliefs, is unable to attend classes on a particular day shall be excused from attendance requirements and from any examination or other assignment on that day. The student shall make up the examination or other assignment missed because of the absence.” To request accommodations for this course for religious observance, visit the Office of the Registrar’s website (https://registrar.uoregon.edu/calendars/religious-observances) and complete and submit to the instructor the “Student Religious Accommodation Request” form prior to the end of the second week of the term.