In this course, we bring together the human experience of science with its public perception as embodied in theatre. After all, what is more dramatic than the excitement (and terror) of discovery, that moment when the earth seems to shift beneath one’s feet and everything appears changed? Playwrights have recognized the inherent drama of scientific discovery for centuries, but the last fifteen years especially have seen an explosion of new plays about science and scientists. Science on Stage explores the range of science plays now available, with a particular interest in understanding how they reflect the public understanding of science, as well as understanding the science and theatre history that inform the plays’ content and form. Students will read plays on a variety of scientific subjects written in many different styles and collaborate in interdisciplinary teams to discuss and synthesize course material in the conception of an original live performance event about science. Our ultimate goal is testing the boundaries and building bridges between science and story.

Content Overview
Students will read plays that have been significantly informed by science, in content, form, or both. Instructors and guests will contextualize each play through lectures, demonstrations, or performances. Students will participate in discussion, activities, and an interdisciplinary project that will lead to a performance about science.

Learning Goals
By the end of this course, students will
1. Have read and analyzed significant plays about science;
2. Be able to explain the scientific and theatrical context of each play;
3. Have collaborated in an interdisciplinary group to develop a performance piece “about” science directed at a specific audience.

Teaching Methods
In general the week will begin with a discussion of initial responses to the play and then instructors will then provide contextualizing lectures, demonstrations, supplementary readings, or performances, as dictated by the script and the science. With this context in mind, students will discuss the play a second time, this time delving deeper into a close analysis of the text and its subject matter.
**REQUIRED TEXTS**


Hnath, Lucas. Isaac’s Eye. (on Canvas)


Ziegler, Anna. Photograph 51. (on Canvas)

**REQUIRED PERFORMANCES**

Students are required to see the Department of Theatre’s production of In the Next Room, or the vibrator play some time during the first weekend of its run (the 14th week of the semester), before the last day of class. Dept. shows are free to all students with a valid student id.

**EVALUATION METHODS**

(More detailed instructions for each assignment will be discussed in class.)

*Essays (40%)* For each play we read, students will write a 2-page response paper. We will provide you with a specific prompt for each play. Ultimately, these short essays will be part of a larger conversation—conducted over the whole semester—on the relationship between science and dramatic storytelling.

*Interdisciplinary Project (40%)* Starting around mid-term, we will begin to conceive an interdisciplinary performance piece. Students will select a scientific discovery or scientist to research and then plan a live performance or art installation piece using live bodies that is "about" that discovery or scientist. During the semester, we will introduce you to various theatrical approaches to storytelling, from drama to rap. Students will be asked to define their ideal audience and venue (for example, children in a museum environment or adults in a traditional theatre space).

*Collaborative Workspace (10%)* In conjunction with the Interdisciplinary Project described above, we will use an online collaborative workspace (on Canvas) to regularly record discussions and to exchange documents, research, and information. The collaborative workspace will be a way of documenting and evaluating each class member’s engagement in and contributions to the project.

*Participation (10%)* Science and art require presence. Thus, attendance and active engagement in class discussions and activities are extremely important. Consider this a lab or studio—we will discuss what we’ve read and heard, but we will also conduct experiments, testing out ways of engaging with science and art, as well as blurring the apparent boundaries between them.
**Total Grade**

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Essays</td>
<td>40%</td>
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<tr>
<td>Collaborative Workspace</td>
<td>10%</td>
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<tr>
<td>Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Interdisciplinary Project</td>
<td>40%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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**Grading Scale**

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>95-100</td>
<td>A</td>
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<tr>
<td>90-94</td>
<td>A-</td>
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<tr>
<td>87-89</td>
<td>B+</td>
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<tr>
<td>83-86</td>
<td>B</td>
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<td>80-82</td>
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<td>77-79</td>
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<td>60-62</td>
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**Class Policies**

*Participation/Attendance:* Both theatre and science require the physical, mental, and emotional presence of participants. Therefore, regular attendance and active participation in classroom activities is expected of all students. Note that the **Collaborative Workspace** evaluation method is intended to encourage active participation by all class members and to document that participation.

*Late Work:* We will accept late assignments without penalty only when prior arrangements have been made with your collaborators (if applicable) and the instructors. Equipment failure will earn our sympathy but will not exempt you from a penalty for lateness. The penalty for late work is -5% per day. On-time work is defined as work submitted before or by the deadline.

*Cell Phones:* Turn them off before class begins. Students who text during class will be asked to leave. Cell phones that ring during class may be answered by instructors.

*Note-Taking:* You are strongly encouraged to take notes during lectures and discussions. This will aid your retention of course material, provide you with sources for your analytical papers, and make it much easier to document your work in your collaborative workspaces. You may take notes in longhand or on a computer. Students who use their computer to surf the net, engage in social networking, email, shop, do assignments for other classes, hack into Federal databases, or watch episodes of their favorite HBO dramas, however, will be asked to stop using their laptops for the alleged purpose of note-taking.
AMERICANS WITH DISABILITIES ACT
The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

UNIVERSITY OF UTAH STUDENT CODE
All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content.

According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, and I will do so, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

SEXUAL HARASSMENT
Sexual harassment is unwanted, unwelcome behavior of a sexual nature. It is a form of discrimination and a violation of University policy, Student and Faculty Codes, and state and federal laws. Report any sexual harassment of which you become aware, and be sensitive to how others view what you say and do. If you feel you are being sexually harassed or are uncertain about whether you are experiencing sexual harassment, talk to a faculty member, University official, or contact the Office of Equal Opportunity & Affirmative Action, 135 Park Building, 581-8365 (V/TDD).

ACCOMMODATIONS POLICY
Some of the content of this course may include material that conflicts with the core beliefs of some students. Please review the syllabus carefully to see if the course is one that you are committed to taking. If you have a concern, please discuss it with me at your earliest convenience. For more information on the University’s accommodations policy, visit http://www.admin.utah.edu/ppmanual/9/9-7.html.

Note: The syllabus is not a binding legal contract. It may be modified by the instructors when the student is given reasonable notice of the modification and when the changes will best serve the educational experience of the students.
<table>
<thead>
<tr>
<th><strong>CLASS SCHEDULE</strong></th>
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<tbody>
<tr>
<td>Tues 1/7</td>
<td>Introductions – Why science on stage?</td>
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<tr>
<td><strong>BEGINNINGS</strong></td>
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| Thurs 1/9 | The Science & Fiction of Kubrick’s 2001: A Space Odyssey  
Watch 2001 for class (you can stream it via Amazon for $1.99) |
| Tues 1/14 | Continue discussion of 2001 |
| Thurs 1/16 | Evolution & After Darwin |
| Tues 1/21 | After Darwin  
Essay 1 Due |
| Thurs 1/23 | Newtonian Physics & Isaac’s Eye |
| Tues 1/28 | Isaac’s Eye  
Essay 2 Due |
| **DNA & ETHICS** |  |
| Thurs 1/30 | DNA & Photograph 51 |
| Tues 2/4 | Photograph 51  
Essay 3 Due |
| Thurs 2/6 | Photograph 51 |
| Tues 2/11 | Gravity, Cloning, & Moon |
| Thurs 2/13 | Cloning & A Number  
Essay 4 Due |
| Tues 2/18 | A Number |
| Thurs 2/20 | Medical Ethics & Miss Evers’ Boys |
| Tues 2/25 | Miss Evers’ Boys  
Essay 5 Due |
| **ATOMIC ENERGY** |  |
| Thurs 2/27 | How to build an a-bomb & Copenhagen |
| Tues 3/4 | Copenhagen  
Essay 6 Due |
| Thurs 3/6 | Copenhagen |
| **SPRING BREAK** |  |
| Tues 3/18 | Radiation & The Love Song of J. Robert Oppenheimer |
| Thurs 3/20 | The Love Song of J. Robert Oppenheimer  
Essay 7 Due |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Tues 3/25</td>
<td><em>The Love Song of J. Robert Oppenheimer</em></td>
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<tr>
<td>Thurs 3/27</td>
<td>Thermodynamics &amp; fractals &amp; <em>Arcadia</em>, oh my!</td>
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<tr>
<td>Tues 4/1</td>
<td><em>Arcadia</em></td>
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<td>Essay 8 Due</td>
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<tr>
<td>Thurs 4/3</td>
<td><em>Arcadia</em></td>
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<tr>
<td>Tues 4/8</td>
<td>Final Project Work</td>
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<td>Thurs 4/10</td>
<td>Final Project Work</td>
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<tr>
<td>Tues 4/15</td>
<td>Final Project Presentations</td>
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<tr>
<td>Tues 4/17</td>
<td><em>Back to the Beginning: the Technology of Sex</em></td>
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<td>Electricity &amp; <em>In the Next Room</em></td>
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<tr>
<td>Tues 4/22</td>
<td><em>In the Next Room</em> (discussion of production)</td>
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<td>Essay 9 Due</td>
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<td>Last day of class</td>
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<td><strong>Final Exam Period: Monday, April 28, 8-10am</strong></td>
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<td>We may use this time, so please reserve it.</td>
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