SCIENCE AND THEATRE

SPRING 2019

Professor: “C” Heaps (Dr. “C”)

Contact: Phone - 337-7126; E-mail - c.heaps@kzoo.edu

Class Location: ULC 312

Class Time: TR 12:10-2:00pm

Office Location: Theatre Office, Light Fine Arts Basement

Office Hours: MT 3-5pm, R 4-5pm

**What is this course?**

This course examines the intersection of science and theatre. After examining ways in which theatre has constructively (or destructively) interacted with the scientific world, we will write our own “science plays”, incorporating feedback from faculty advisors in the science disciplines. In the process, we will understand more ways in which the arts and humanities can support science and vice versa.

**What will you be able to do by the end of this course?**

 After completing this course, the student should be able to:

* Effectively write a one-act play
* Evaluate plays, both for artistic and scientific content
* Dramatize their own ideas pertaining to science
* Apply knowledge and skills from multiple disciplines to a single product

**What texts are required for this course?**

Available at the college bookstore:

Churchill, Caryl. *A Number*

Clements, Marie. *Burning Vision*

Frayn, Michael. *Copenhagen*

Stoppard, Tom. *Arcadia*

Washburne, Anne. *Mr. Burns, a post-electric play*

Available on New Play Exchange:

 *Alien Love Triangle* by Katherine Glover

Available on Moodle:

 Čapek, Karel. *R.U.R.*

 Glass, Philip. *Einstein on the Beach*

 Ibsen, Henrik. *An Enemy of the People*

Other short readings may be made available online through Moodle. They will always be added with at least a week notice before we discuss them.

**How will you be graded in this course?**

Evaluation will be determined by:

20% - Participation

20% - Short Responses

20% - First Partial Draft of Play

30% - Final Play (First Full Draft and Final)

10% - Final Reading of Play (attendance and casting/“directing”)

\*Attendance in class and at events is mandatory and failure to do so will subtract points.

**GRADE %**

A+ 97%

A 94%

A- 90%

B+ 87%

B 84%

B- 80%

C+ 77%

C 74%

C- 70%

D+ 67%

D 64%

D- 60%

F Below 60%

**What will we be doing in class?**

Our average week will be split between two activities: reading plays that involve science and writing your own science play

To that end, we’ll be doing playwriting exercises in class, discussing the plays you’ve read, and talking about the ways we human beings (and some nonhumans too) define and practice science.

There will be some short papers based off of our readings, but the main assignment is a short play that will be turned in once at midterms then expanded and improved on for the final.

**What should I bring to class?**

Do bring:

 Whatever work we are discussing in class.

 Whatever method you have for taking notes

 Yourself, actively engaged

Do NOT bring:

 Homework from other classes

 Disrespect for anybody present

**What about electronics?**

I love electronic devices. You probably do too. I'm going to assume you can act as adults and responsibly use (or not use as the case may be) your laptops. Please turn off your cell phones. But know, if you use the technology to check your e-mail, stalk Facebook, or any other similar activity, you're primarily hurting yourself. Theatre is a live event; be grateful for the chance to have face-to-face time with fellow human beings. Being in your seat does not guarantee your presence, and we want you here! Also, if you are continually being too much of a disruption to the class, this privilege will be taken away.

**What about live theatre?**

Since plays are meant to be experienced in live performance, you are required to see Kalamazoo College’s production of ***Twelfth Night***. You will see it during **Week 7, May 16-19 @7:30pm** in the Nelda K. Balch Playhouse.

**Alphabet Soup of Policy**

**Attendance**

Attendance is absolutely essential to this course. Students are allowed TWO absences because life happens, but otherwise, people need to be in class, engaged, on time. **You must never be late or miss a class in order to be considered for the full amount of the participation grade component.** Exemptions may be granted for hospitalization, deaths in the family, etc., at my discretion.

**Honor Code and Academic Honesty**

This course operates under the **College Honor System**. That means: we treat each other with respect, we nurture independent thought, we take responsibility for personal behavior, and we accept environmental responsibility. **Academic honesty** is a critical part of our value system at K. When you borrow an idea, express the idea in your own words, thus thinking it through and making it your own, and acknowledge the source of the idea with the proper citation and reference, or, in certain situations, use the exact words of the source in quotation marks and acknowledge it with the proper citation, page number, and reference. Ideas raised in class are part of the public domain and, therefore, sources of the ideas need not be acknowledged. If you are ever in doubt about this, you must ask. For the full policy, see <https://reason.kzoo.edu/studev/policies/dishonest/>.

Plagiarism and other forms of academic dishonesty will result in a score of zero points on the assignment, further disciplinary action from the Dean’s Office, and possible course failure. **No exceptions.** Be sure you are presenting your own work.

**Disabilities Accommodation**

If you are a student with a disability who seeks accommodation or other assistance in this course, please let me know as soon as possible. Kalamazoo College is committed to making every effort to providing reasonable accommodations. If you want to discuss your overall needs for accommodation at the College, please direct questions to the Associate Dean of Students Office, (269) 337-7209. For more information, please see <https://www.kzoo.edu/student-life/students-with-disabilities>/.

**Learning Commons**

The Learning Commons is a network of peer support available to help you with a variety of skills and disciplines. The Writing Center, Research Consultant Center, and Center for New Media Design are on the first floor of Upjohn Library. Our English as a Second Language and Learning Specialist support programs are located there as well. The Math-Physics Center is in Olds Upton Hall. It is my observation that students who frequent these centers generally learn more and receive higher grades, so I encourage you to use them early and often. You can find more information about each of these centers here: <https://reason.kzoo.edu/learningcommons/>.

**Late Work**

All assignments are due in class on the date specified. Late work will be graded down one full grade for each day, including the day it’s due. I am willing to negotiate extensions, but please do so in advance. NO extensions for the final essay.

**Communication**

I will communicate with the class via e-mail or Moodle announcements. I will answer your questions as soon as I can, but I may not check e-mails late at night or on the weekend.

**Sensitive or Controversial Content**

*Some of the plays we will read contain content that some may consider controversial.* If at any time you truly find such material so offensive that you cannot participate in discussion or complete an assignment, please let me know. If you like, you may tell me by note or email. Please communicate with me if you are experiencing any problems in the course.

**Weekly Breakdown**

**Week 1 – STE(A)M**

* What do you mean, science and theatre?
* How does theatre influence science?
* How does science influence theatre?

Tuesday, April 2

* Intro

Thursday, April 4

* READING: “Marginalized Bodies of Imagined Futurescapes: Ableism and Heteronormativity in Science Fiction” by Josefine Wälivaara
* READING: *Alien Love Triangle* by Katherine Glover
* ASSIGNMENT: Choose a science

**Week 2 – Who Controls the Past Controls the Future**

* What role do dystopian stories have in our analysis of scientific progress?
* What is the relationship between technology and entertainment?
* What role does science play in science fiction?

Tuesday, April 9

* DISCUSSION: Dystopias
* READING: “Long-Term, Large-Scale Blackout Scenario” by Thomas Popik

Thursday, April 11

* LECTURE: Thinking About Thinking
* READING: *Mr. Burns, a post-electric play* by Anne Washburn
* ASSIGNMENT: Structured Reflection

**Week 3 – Political Will is a Renewable Resource**

* What is environmental science?
* How can you write about science at the center of political conflict?
* How can you disseminate your work as a playwright?

Tuesday, April 16

* LECTURE: Devised Theatre
* READING: “Climate Change Theatre is LIT” by Carolyn Reeves

Thursday, April 18

* READING: NPX play from a list
* ASSIGNMENT: “How will your play affect the community?”

Saturday, April 20, 12-5pm down time

* Kalamazoo Earth Day Event
* ACTIVITY: Devise and read a theatre piece

**Week 4 – The Mysterious is the Source of All True Art and All Science**

* How can you use elements of theatre beyond plot to effectively communicate?
* What does collaboration in theatre creation look like?
* What qualifies as theatre?

Tuesday, April 23

* LECTURE: Elements of Theatre
* READING: *Poetics* by Aristotle

Thursday, April 25

* LECTURE: Elements of Theatrical Production
* VIEWING: *Einstein on the Beach* by Philip Glass
* ASSIGNMENT: No-Plot Scene

**Week 5 – Three Primal Urges: Food, Sex, and Rewriting Someone Else's Play**

* How do I write my own play?
* How do I help people write their plays?
* What’s the difference between a ten-minute play and a one-act?

Tuesday, April 30

* Extreme Writing Exercises Day
* READING: TBD

Thursday, May 2

* WORKSHOP: First Draft
* ASSIGNMENT: First Draft – Ten Minutes of your play

**Week 6 – These Aren’t the Droids You’re Looking For**

* What are the ethical dilemmas that scientists face?
* How do writers use elements of science or science fiction to talk about broader issues?

Tuesday, May 7

* READING: “Introduction: A History of Social Science Fiction” by Neil Gerlach and Sheryl Hamilton

Thursday, May 9

* READING: *R.U.R.* by Karel Čapek
* ASSIGNMENT: Initial Scene

**Week 7 – I Am Become Death, the Destroyer of Worlds**

* What different perspectives are there on the same event?
* How did the atomic bomb challenge scientific progress?
* Should you write about scientists or the people their work affects?

Tuesday, May 14

* READING: Selections from *The Manhattan project: the birth of the atomic bomb in the words of its creators, eyewitnesses, and historians* ed. Cynthia Kelly

Thursday, May 16

* READING: *Copenhagen* by Michael Frayne
* READING: *Burning Vision* by Marie Clements
* ASSIGNMENT: Compare/Contrast
* ASSIGNMENT: Watch the performance of *Twelfth Night*

**Week 8 – Blame is Easy - Truth is Harder**

* What are the bounds of medical science?
* In the face of truth, what are your responsibilities?
* How do you prepare to see a play?

Tuesday, May 21

* READING: “Human impact: the ethics of I=PAT” by Paul Erlich

Thursday, May 23

* READING: *An Enemy of the People* by Henrik Ibsen
* READING: *A Number* by Caryl Churchill
* ASSIGNMENT: Statement of Ethics

**Week 9 – Mathematical!**

* What is reality?
* How can you confront your audience with complex yet fundamental concepts?
* What is the relationship of genre to this type of work?

Tuesday, May 28

* READING: “What is Chaos Theory?”
* READING: *Arcadia* by Tom Stoppard
* ASSIGNMENT: Full Play Draft

Thursday, May 30

* PERFORMANCE: Cesareo, Adrian, Casey, Alonte

**Week 10 – Curtains Up**

* What did you learn about writing a play?
* What did you learn about the interaction between science and theatre?
* How does it feel to have your work read out loud?

Tuesday, June 4

* PERFORMANCE: Abby, Jena, Jaylin, Houston, Rosesandy

Thursday, June 6

* PERFORMANCE: Mo, Cooper, Mia, Syd, Lizbeth

**Finals**

We will not be meeting during our finals period

Tuesday, June 11

* ASSIGNMENT: Final Draft, due 12pm (noon)

Works Cited for Weekly Titles:

Week 2: George Orwell, *1984*

Week 3: Al Gore, *An Inconvenient Truth*

Week 4: Paraphrase from Albert Einstein, as quoted in *Introduction to Philosophy* (1935) by George Thomas White Patrick and Frank Miller Chapman

Week 5: Paraphrase of Romulus Linney, from *Six Plays*

Week 6: George Lucas, *Star Wars*

Week 7: The Bhagavad-Gita, as quoted by J. Robert Oppenheimer

Week 8: Dr. John W. Thackery, from *The Knick*, Season 1, Episode 2

Week 9: Finn from *Adventure Time*