

This course will investigate various treatments of science by literature according to both traditional and contemporary (postmodern) theories within the philosophy of science. According to Jean Francois Lyotard, scientific knowledge has traditionally been legitimated for being either emancipatory, or according to how it assists in the realization of a unified scientific whole. Texts by Ibsen and Glaspell provide an opportunity for investigating the poignancy of the first of these legitimization narratives, while texts by Ursula LeGuin and John Banville will help us evaluate the second legitimization narrative. Finally, we will conclude the semester by questioning whether scientific knowledge is, as Foucault suggests, “linked in a circular relation with systems of power which produce and sustain it, and to effects of power which it induces and which extend it. A regime of truth;” relevant texts to this discussion are Thomas Pynchon’s *The Crying of Lot 49* and Darren Aronofsky’s *Pi*.

1. Core Texts:

- John Banville *Doctor Copernicus*
- Bertolt Brecht, Galileo, Grove Press, Trans. Eric Bentley, 1966
- Friedrich Durrenmatt, *The Physicists*
- Frayn, Michael. *Copenhagen*
- Susan Glaspell, *The Verge* (available on NTU-Learn)
- Henrik Ibsen, *An Enemy of the People* (available on NTU-Learn)
- LeGuin, Ursula. *The Dispossessed*.
- Pynchon, Thomas. *The Crying of Lot 49*
- Sobel, Dava. *Longitude. The True Story of the Lone Genius Who Solved the Greatest Scientific Problem of his Time*
- Shelagh Stephenson, *An Experiment with an Air Pump*
- Caryl Churchill, *Traps* (available on NTU-Learn)
- All other secondary readings are available on NTU-Learn

2. Films:

(held in the library and to be screened in class)

Pi, Darren Aronofsky

Method of Instruction

Lectures : 2 hours per week

Tutorials : 1 hour per week

Course Assessment

Continuous Assessment : 50 %

Final Examination : 50 %

100%

A.

Proposal for the short Essay: This 400 word proposal will make the case that the subject you are interested in is worthy of an essay. Those failing to turn this assignment in on time will lose a letter grade off their final essay.

Final Essay: This 2200 word essay (lower limit) must defend an original thesis about one of the works read in class – and do so by reflecting on secondary material about the play and/or the author of the play. You must use at least 3 secondary sources.

B. The Final Examination will consist of two essays worth equal points.

****Warning** Plagiarism will not be tolerated and will result in automatic failure of the course.**

Lecturer	Office Room No.	DID	E-mail Address
Daniel Jernigan*			djernigan@ntu.edu.sg

* Course Co-ordinator

Proposed Lecture Schedule

Week No.	Topics	Readings
Week 1	Course Introduction	
Week 2	Science as Progress	Henrik Ibsen, <i>An Enemy of the People</i> ; Leo Marx, “Does Improved Technology Mean Progress”
Week 3	Science and the Humanities	Susan Glaspell, <i>The Verge</i> ; C. P. Snow, “The Two Cultures”
Week 4	Scientific Method	LeGuin, Ursula. <i>The Dispossessed</i> ; Popper, “Conjectural Knowledge”
Week 5	Science and Religion	Bertolt Brecht, <i>Galileo</i>
Week 6	Science and Historiography	Sobel, Dava. <i>Longitude. The True Story of the Lone Genius Who Solved the Greatest Scientific Problem of his Time</i> Thomas Kuhn, “The

Week No.	Topics	Readings
		Function of Dogma”
Week 7	The Scientist as Heroic Figure	John Banville <i>Doctor Copernicus</i> Excerpt from <i>The Postmodern Condition</i> (Part 1)
Week 8	<i>Recess</i>	
Week 9	Research Paper interviews – no class	
Week 10	Science and Madness	Friedrich Durrenmatt, <i>The Physicists</i> Excerpt from <i>The Postmodern Condition</i> (Part 2)
Week 11	Science and Postmodern Literature	Pynchon, Thomas. <i>The Crying of Lot 49</i> Lyotard,
Week 12	Science and Power	Caryl Churchill, <i>Traps Pi</i> , Darren Aronofsky Foucault, From “Truth and Power”
Week 13	Postmodern Science and Literature	Frayn, Michael, <i>Copenhagen</i> ; Gross and Levitt, “The Academic Left and Science”
Week 14	Science and Ethics	Shelagh Stephenson, <i>An Experiment with an Air Pump</i>