

THE HISTORY OF SCIENCE AT THE MOVIES

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In the upcoming weeks, we'll be moving on to our study of "inductive" reasoning related to science. In this assignment, you'll prepare for this by watching a biography of 1+ famous scientists.

Please watch at least ONE of the following movies. The (required) **Quiz** for this week will ask you which movie you watched and ask you to provide a short "review" for it. You also have the option of completing a BONUS "project" that will replace your lowest project score (or, allow you to "skip" a project later if you'd like).

The Imitation Game (2014)	https://www.justwatch.com/us/movie/the-imitation-game
A Beautiful Mind (2001)	https://www.justwatch.com/us/movie/a-beautiful-mind
Hidden Figures (2016) – Free version available	https://www.justwatch.com/us/movie/hidden-figures
The Theory of Everything (2014)	https://www.justwatch.com/us/movie/the-theory-of-everything-2014
Temple Grandin (2010)	https://www.justwatch.com/us/movie/temple-grandin
The Man Who Knew Infinity (2015) – Free version available	https://www.justwatch.com/us/movie/the-man-who-knew-infinity
Darwin's Darkest Hour (2009)	https://www.justwatch.com/us/movie/darwins-darkest-hour
Agora (2009) – Free version available	https://www.justwatch.com/us/movie/agora
Einstein and Eddington (2008)	https://www.justwatch.com/us/movie/einstein-and-eddington
Tesla (2020)	https://www.justwatch.com/us/movie/tesla
Radioactive (2019)	https://www.justwatch.com/us/movie/radioactive
Kinsey (2004)	https://www.justwatch.com/us/movie/kinsey
Darwin's Dangerous Idea (2002) – Free version available	https://youtu.be/FUCxWMtK9CY
Galileo's Battle For The Heavens (2002) – Free version available	https://youtu.be/zVL1Bxylag4
Calculating Ada: The Countess of Computing (2015)	https://youtu.be/QgUVrzkQgds
Inherit the Wind (1960) – Free version available	https://www.justwatch.com/us/movie/inherit-the-wind-1960
Hawking (2004) – Free version available	https://youtu.be/pUt62wltOdc

Newton's Dark Secrets (2002) – Free version available	https://youtu.be/s2YZN2L700Q
Secret of Photo 51 (2003) – Free version available	https://youtu.be/GID5uSmYHxY
Einstein's Big Idea (2005) – Free version available	https://iowa.pbslearningmedia.org/resource/nvfb-sci-einsteinsidea/wgbh-nova-einsteins-big-idea-full-length-broadcast/
American Experience: Rachel Carson (2017)	https://www.justwatch.com/us/movie/american-experience-rachel-carson

OPTIONAL PROJECT: SEVEN QUESTIONS

You also have the option of writing a more detailed response, which will be graded as a “project” (or “problem set.” This will take the place of your lowest problem set score (or, you can choose to “skip” a project later in the class).

The project consists of writing a 500 to 1000 word response in which you answer the following SEVEN groups of questions:

1. What scientist(s) are depicted in the movie? How does this movie relate to your interests?
2. What “happens” during the movie. (Provide a brief plot summary).
3. What are one or two hypotheses (or “theories”) that the scientists proposed or defended? Explain these in as much detail as you can, using your own words and examples.
4. What sorts of “evidence” did the scientists gather to help convince people of the truth of their hypothesis or theory?
5. What barriers (personal, political, or scientific) did the scientist(s) have to overcome?
6. How did the scientists “background” or “personal life” influence their scientific process? Where did they get their “ideas” from?
7. Overall, what did you think of the movie? Would you recommend it to other students? Why or why not?

PROJECT REQUIREMENTS

1. The project should be between **500** and **1000 words**. I won't penalize you for going over, though please make an effort to be concise as possible, given the material. Make things “as simple as possible, but no simpler.”
 - a. A-level essays are often (though not always!) closer to 1,000 words than 500.
2. Material I've provided you with in our “textbook” (which contains both my lecture notes and other readings) can be cited informally by identifying the chapter, page, and author (if needed). If you choose to use outside resources, please use a standard citation style (such as APA, MLA,

or Chicago), and provide a full citation. As a rule, **no more than 15%** of your paper should be quotes.

3. Please don't use the words or ideas of others without proper attribution. Please see the syllabus for details on plagiarism and academic integrity policy. I regularly use www.turnitin.com to check for plagiarism or related issues.
4. Essays that reproduce the handouts will not receive good grades. Nor will essays that simply "give your thoughts" on an issue (without demonstrating knowledge of the class material, and the ability to apply it to novel cases). Since the project is meant to help you understand the class material, you should try to use your own words and examples to explain what you've learned.
5. Please submit your essays as MS Word files. I will grade them on a **first-submitted, first-graded** basis.

GRADING RUBRIC

The project is worth FIVE points. Your grade will depend on how well you do each of the following:

1. How well are you able to **explain** and **apply** the relevant course material? By the end of the essay, the reader should come away with a clear idea of what you've learned in the class, and how it applies to whatever problem/issue you are writing about.
2. To what extent does your essay offer a coherent and creative response to the problem/question? In an argumentative essay, for example, you should make an (evidence-based) **argument** for a **thesis** and be sure to consider any potential objections fully.

Factors such as your paper's **structure** (e.g., intro/body paragraphs/conclusion) and **language** (e.g., grammar, style) are important to the extent they influence the above. The grading criteria are as follows:

Grade	Description
0	No answer was submitted or evidence of plagiarism.
3 or below (D or F)	Fails to meet minimal requirements regarding content (e.g., addresses a related question) or word count. Essays that simply report what you "believe" or "feel" without providing an <i>argument</i> may receive grades in this range.
C (3.5 points)	It meets minimal requirements regarding both content (it offers an answer to the assigned question and attempts to defend this answer) and word count. However, there may be some significant errors or omissions when explaining relevant class material or providing a detailed, complete response to the question.
B (4 points)	Fully meets content and word count requirements and provides satisfactory explanations of most major arguments and concepts from class. There are no significant errors in argumentation or explanatory gaps. However, explanations/examples/arguments may, at points suffer from a lack of clarity or completeness compared to A essays.
A (5 points)	Meets and exceeds minimum requirements. The essay's treatment of course material shows a complete mastery of the relevant content and provides a creative, well-thought-out response.

I will grade essays in the order they are submitted (first-come, first-serve).