

The Assignment:

A paradigm shift is a fundamental change in methodology or underlying assumptions. In looking at the history of science and mathematics, we note that our methodology and knowledge was constructed as an arduous and contentious process, riddled with incorrect assertions and towering brilliance (wonderfully, it can be both). What we know as the facts of science and mathematics were not always understood. Once realized though, the entire landscape of knowledge was changed: the paradigm shifted. Think Darwin and natural selection, Newton and calculus, Kepler or Galileo on planetary motion/position.

Your task is to compose a researched essay detailing a paradigm shift in the mathematics or science. This may take the form of any idea or discovery that can complete the requirements below; the only additional restriction on topic is that it cannot be an engineered technology. Your essay will have two major sections:

Section I: Historical Analysis of the Paradigm Shift

Identify and describe a paradigm shift in scientific or mathematical history. Describe:

- How the field of study functioned prior to the paradigm shift
- How the paradigm shift came into effect
- What effect(s) the shift had on the field of study

Section II: Cultural Analysis of the Shift's Impact Beyond the Field

In this section describe the effects of the paradigm shift on human society, culture, and knowledge.

Consider:

- How did the world react?
- What in daily life changed?
- How did other fields of study react?
- What other important individuals or fields of study had a paradigm shift because of the new knowledge?

Guidelines:

Your essay will be evaluated on the inclusion and quality of the following criteria:

- 4-5 full pages (the length will be strictly enforced).
- Typed in size twelve Times New Roman font and double spaced.
- Cite from at least 3 reliable, scholarly sources.
- Have a heading with your name, course number, and section. No more is needed.
- Follow proper MLA citation format employing both in-text citations and a Works Cited page (which does not count toward the page length).
- Follow proper essay format and employ formal, college-level, standard written English.
- Have an appropriate and creative title (not the assignment title).

It may help to consider these items a check list.

Due Date:

Friday, 27 March—before 11pm

Paradigm Shift
HUM 234 with Prof. Gorm

Suggested Essay Format:

Feel free to use section headers in this essay (they should not be the generic ones provided below).

Note that you still need an introduction and conclusion. For example:

- I. Introduction
 - a. Have one or more paragraphs framing the efforts of this essay. Remember the pieces of an intro paragraph (Hook, Definition of Terms, and Thesis)
- II. Historical Analysis of the Paradigm Shift
- III. Cultural Analysis of the Shift's Impact Beyond the Field
- IV. Conclusion
 - a. Do not just end your essay. Summarize the ideas and justify those efforts by offering the reader a use for the knowledge in pursuits beyond this essay