

Syllabus for Mr. Mathews' Science Fiction versus Science Fact
Prerequisites: 10th grade reading level and interest in science fiction

Course description: Science Fiction versus Science Fact is designed to separate current science fact and theory from fiction. All good science fiction is based upon valid science which is either extrapolated past our current understanding or alters our current scientific understanding to create a universe unknown to us. This course will use classic sci-fi literature and cinema to determine where science reality ends and the fiction begins. We will be reading 3 science fiction books and watching the movies based upon these two books. Those books are: 20,000 Leagues Under the Sea by Jules Verne, War of the Worlds by H.G.Wells, & Contact by Carl Sagan. For each book and movie you will complete a reading guide and a viewing guide. We will devote several hours of silent, in class reading for these books; however, some out of class reading may be required to finish the books on time. We will have daily discussions to begin each class on the chapters assigned to be read by that day. We will spend no more than 3 weeks total per book & movie. These 3 movies and books will be covered during 5 – 6 weeks of the class. In addition to these 3 pieces of science fiction we will spend 6 – 7 weeks viewing other, as yet to be determined movies with viewing guides. Some of these movies will be rated PG-13. We will also conduct internet research on science fiction that has become science fact (example: space flight); as well as, the feasibility of future science facts from current science fiction (example: worm hole travel).

Trimester Grade

I DO NOT give grades, you earn them.

<u>Categories of Class Grades</u>	<u>Approximate Points</u>
Daily Participation *	300 points
Reading Guides	300 points (100 pts. each)
Viewing Guides	500 points (50 pts. each)
2 Research Projects	200 points
Final Exam	20% of grade per school policy

Don't expect to be able to do extra credit papers/projects to raise your grade!

*** Daily Participation Rubric ***

5 points	On task 100% of class time
4 points	On task 80% of class time
3 points	On task 60% of class time
2 points	On task 40% of class time
1 point	On task 20% of class time
0 points	Off task the entire class period

Items Needed Daily

You will need the following items for class each day: I will not allow you to leave the room to get forgotten materials.

- Pencils and/or pens
- A folder for handouts

Classroom Rules

- Be Punctual (be in the room and ready to begin at the beginning of class, {when the tardy bell rings})
- Be Prepared (have all materials {homework, book, notebook, pencil, etc.} ready on time)
- Be Polite (respect all people and property {including yourself})
- No food or drink (includes no sun flower seeds, or spitting of anything); the exception is water.
- ALL school wide rules will be enforced, no exceptions.

Classroom Policies and Behavioral Expectations:

1. All ACHS policies outlined in the student hand book will be followed.
2. Per SBDM policy, only one free tardy is awarded to each student per trimester (**NOT** 1 per class).
3. Restroom passes will be awarded; however, you may use this privilege only when you are doing independent work or guided practice (NOT during discussion or a video); and never during the 1st or last 10 minutes of class.
All assignments are due on time. Late assignments WILL be turned in for a maximum of 50% credit.
4. If you lose or damage a science fiction book, you will be responsible for the total replacement cost of the book.
5. For most misbehavior the 3 strike rule applies: 1st = warning, 2nd = parent contact, 3rd = office referral

Science fiction: From Wikipedia: *Science fiction is a genre of fiction dealing with the impact of imagined innovations in science or technology, often in a futuristic setting. It differs from fantasy in that, within the context of the story, its imaginary elements are largely possible within scientifically established or scientifically postulated laws of nature (though some elements in a story might still be pure imaginative speculation). Exploring the consequences of such differences is the traditional purpose of science fiction, making it a "literature of ideas". Science fiction is largely based on writing rationally about alternative possibilities. The settings for science fiction are often contrary to known reality, but the majority of science fiction relies on a considerable degree of suspension of disbelief provided by potential scientific explanations to various fictional elements.*

These may include:

- A setting in the future, in alternative timelines, or in an historical past that contradicts known facts of history or the archaeological record
- A setting in outer space, on other worlds, or involving aliens
- Stories that involve technology or scientific principles that contradict known laws of nature
- Stories that involve discovery or application of new scientific principles, such as time travel or psionics (the study and/or practice of using the mind to induce paranormal phenomena. Examples of this include telepathy, telekinesis, and other workings of the outside world through the psyche.), or new technology, such as nanotechnology, faster-than-light travel or robots, or of new and different political or social systems (e.g., a dystopia, or a situation where organized society has collapsed)

***History of Science Fiction:** As a means of understanding the world through speculation and storytelling, science fiction has antecedents back to mythology, though precursors to science fiction as literature can be seen in Lucian's True History in the 2nd century, some of the Arabian Nights tales, The Tale of the Bamboo Cutter in the 10th century, Ibn al-Nafis' Theologus Autodidactus in the 13th century, and Jules Verne's A Journey to the Centre of the Earth and Twenty Thousand Leagues Under the Sea in the 19th century. Following the Age of Reason and the development of modern science itself, Jonathan Swift's Gulliver's Travels was one of the first true science fiction works, together with Voltaire's Micromégas and Kepler's Somnium. This latter work is considered by Carl Sagan and Isaac Asimov to be the first science fiction story. It depicts a journey to the Moon and how the Earth's motion is seen from there. Following the 18th century development of the novel as a literary form, in the early 19th century, Mary Shelley's books Frankenstein and The Last Man helped define the form of the science fiction novel. Then with the dawn of new technologies such as electricity, the telegraph, and new forms of powered transportation, writers like Jules Verne and H. G. Wells created a body of work that became popular across broad cross-sections of society. Wells' The War of the Worlds describes an invasion of late Victorian England by Martians using tripod fighting machines equipped with advanced weaponry. It is a seminal depiction of an alien invasion of Earth.*

In the early 20th century, pulp magazines helped develop a new generation of mainly American SF writers, influenced by Hugo Gernsback, the founder of Amazing Stories magazine. In the late 1930s, John W. Campbell became editor of Astounding Science Fiction, and a critical mass of new writers emerged in New York City in a group called the Futurians, including Isaac Asimov, Damon Knight, Donald A. Wollheim, Frederik Pohl, and others. Campbell's tenure at Astounding is considered to be the beginning of the Golden Age of science fiction, characterized by hard SF stories celebrating scientific achievement and progress. In the 1950s, the Beat generation included speculative writers like William S. Burroughs. In the 1960s and early 1970s, writers like Frank Herbert, Samuel R. Delany, Roger Zelazny, and Harlan Ellison explored new trends, ideas, and writing styles, while a group of writers, mainly in Britain, became known as the New Wave. In the 1970s, writers like Larry Niven and Poul Anderson began to redefine hard SF.

In the 1980s, cyberpunk authors like William Gibson turned away from the traditional optimism and support for progress of traditional science fiction. Star Wars helped spark a new interest in space opera, focusing more on story and character than on scientific accuracy. C. J. Cherryh's detailed explorations of alien life and complex scientific challenges influenced a generation of writers. Emerging themes in the 1990s included environmental issues, the implications of the global Internet and the expanding information universe, questions about biotechnology and nanotechnology, as well as a post-Cold War interest in post-scarcity societies; Neal Stephenson's The Diamond Age comprehensively explores these themes. The television series Star Trek: The Next Generation (1987) began a torrent of new SF shows, including three further Star Trek spin-off shows and Babylon 5.