Science in the Movies Syllabus, Spring 2021
Tuesdays, 12-1:30

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Science and scientists have been a topic in movies almost from the beginning of the "moving picture". Movies cover real and imaginary scientists, scientific issues and controversies, nature documentaries, and science fiction. A premise of this course is that the public's first perceptions of scientific developments often come from movies and can influence both the hopes and/or fears about the implications of scientific advances. This class will include discussions of various topics depicted in the movies. Cultural and scientific issues, both historical and current, surrounding the various topics covered are presented.

Although I am listing selected movies and film clips for each class, these are optional recommendations but you can still enjoy the class without watching these. They can also be enjoyed following the class discussion. The trailers for the different recommended movies can be found on the internet by searching the title of the film (under videos).

March 30, 2021: Science vs. Science in the Movies (Part 1 of class)
The recommended movie clips include: The Scientific Method as demonstrated by *Monty Python and the Holy Grail* (1975) https://www.youtube.com/watch?v=GUQUqV0_PTc
Worst and best depictions of scientific accuracy in films
https://www.youtube.com/watch?v=M7U6nW6d9dw
https://www.youtube.com/watch?v=-YRLkQWNHQ0

Monsters and Forbidden Knowledge (Part 2 of class)
The recommended movie is *Frankenstein* (1931)
The recommended movie clips include: Top 10 Monsters in movies
https://www.youtube.com/watch?v=l1NJzHP26CQ
The prologue to *The Bride of Frankenstein* (1935*)*, where the discussion of the novel takes place https://www.youtube.com/watch?v=o2yKqa4VSRE
The story of Mary Shelley's *Frankenstein* and background to her novel
https://www.youtube.com/watch?v=PDgu25Dsv34&vl=es
A summary of Mary Shelley's *Frankenstein*
https://www.youtube.com/watch?v=XRppXdKDY_c
The Greatest spoof of *Frankenstein--Young Frankenstein* (1974)
https://www.youtube.com/watch?v=2p5AG0Tqh3A

April 6, 2021: **Issues Facing Scientists: Credit for Discoveries, Conducting Risky Research, Sexism, Racism, Funding, Tyrants**
The recommended movies are *Contact* (1997) and *Hidden Figures* (2016)
The recommended movie clips include: Accuracy in *Hidden Figures*
https://www.youtube.com/watch?v=5wfrDhgUMGI

The recommended trailers include: *Picture a Scientist* (2020) and *The Race for the Double Helix* (1987)

April 13, 2021: **Artificial Intelligence and Technology** (Part 1 of class)
The recommended movie is *A.I. Artificial Intelligence* (2001*)*,
The recommended trailers include: *Metropolis* (1927*)*, *Transcendence* (2014)

Scientists in Nature (Part 2 of class)
The recommended movie is *Gorillas in the Mist* (1988)
The recommended movie clips include: the trailers for *Jaws* (1975) and *Never Cry Wolf* (1983)
There is a funny takeoff on the *Jaws* trailer at
 https://www.theinertia.com/comedy/jaws-explained-in-5-minutes-of-brutal-but-hilarious-honesty/

April 20, 2021: **Science, Controversies, and Anti-science: Animal rights, Climate Change, Vaccinations, Evolution, Eugenics, Genetically Modified Foods, etc.**
Recommended trailers include: *Vaxxed* (2016), *Creation* (2009); *Day After Tomorrow* (2004); and *The China Syndrome* (1979)

April 27, 2021: **Genetic Engineering**
The recommended movies are *GATTACA* (1997) and *The Race for the Double Helix* (1987)
The recommended link is a fascinating approach to explaining CRISPR technology at 5 levels of understanding from that of the 7-yr old to the expert: https://www.youtube.com/watch?v=sweN8d4_MUg

May 4, 2021: **Disease and Pandemics**
The recommended movies are *Andromeda Strain* (1971) and *Contagion* (2011)
There are several clips on the Spanish Influenza on the internet that are interesting and relevant to our current situation

May 11, 2021: **Atomic Energy**
The recommended movie is *Fat Man and Little Boy* (1989);
The recommended trailer is: *Them!* (1954)

May 18, 2021: Dystopian Movies: Overpopulation, Underpopulation, and Resource Limits (part 1 of class)
The recommended movie is *Jean de Florette* (1986)
Recommended trailers include: *Soylent Green* (1973), *Blade Runner* (1982), and *The Handmaiden's Tale* (1990)

Space (part 2 of class)
The recommended movie is *October Sky* (1999)
The recommended trailers include: *The Martian* (2015); *2001: A Space Odyssey* (1968*)*, *Gravity* (2013), and *Apollo 13* (1995)

Additional Reading:

DeSalle, Rob and David Lindley. 1997. The Science of Jurassic Park and the Lost World. BasicBooks

Hitchcock, Susan Tyler. 2007. Frankenstein: A Cultural History. W. W. Norton & Company

Ingram, David. Green Screen. 2000. Environmentalism and Hollywood Cinema. University of Exeter Press

Kirby, David A. 2011. Lab Coats in Hollywood: Science, Scientists, and Cinema. MIT Press

Perkowitz, Sidney. 2007. Hollywood Science: Movies, Science & the End of the World. Columbia University Press

Skal, David J. 1993. The Monster Show: A Cultural History of Horror. W. W. Norton & Company

Tudor, Andrew. 1989. Monsters and Mad Scientists: A Cultural History of the Horror Movie. Basil Blackwell

Turney, Jon. 1998. Frankenstein's Footsteps: Science Genetics and Popular Culture. Yale University Press