

ENGH 470 RS: Science & Technoculture

Mondays, 4:30PM–7:10PM, Innovation Hall 137



CONTACT INFORMATION

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OFFICE HOURS Tuesdays 2:00PM–4:00PM

COURSE DESCRIPTION

This course examines the history of film through the lens of science and technoculture. First, we will try to better understand the ways in which science and technology are represented in film. Conversely, we will examine the role that film plays in speculating about the future impact of new sciences and technologies, as well as its role in integrating new technologies into the cultural imaginary.

Over the course of the semester we will take a look at the historical trajectory of science fiction film to get a better understanding of the genre that has dominated the audio-visual representation of science and technology. We will analyze these films to gain a better understanding of the convergence of technology and culture, and subsequently to examine key concepts and debates surrounding embodiment, intelligence, communication, surveillance, automation, artificial intelligence, robotics, cloning, transhumanism, posthumanism, simulation, and virtual reality.

LEARNING OUTCOMES

This course will satisfy the following course-specific student learning outcomes:

1. Students will gain a basic understanding of film criticism, with a specific focus on breaking down shots and analyzing things like montage and mise-en-scene.
2. Students will gain a broad understanding of the historical trajectory of science fiction film as a genre, and will practice utilizing the critical tools of genre analysis to trace that trajectory.
3. Students will gain an introductory understanding of contemporary debates surrounding science and technology – including but not limited to questions of embodiment, intelligence, communication, surveillance, automation, artificial intelligence, robotics, cloning, transhumanism, posthumanism, simulation, and virtual reality – and will gain practice in looking to film as a cultural medium long used for exploring these debates.

Because this course is designated as a Research and Scholarship Intensive (RS) course in the Students as Scholars initiative, it will satisfy additional Student Learning Outcomes for the Creation of Scholarship and Conducting Scholarly Inquiry.

In terms of the Creation of Scholarship, students will learn to:

- + Create an original scholarly or creative project
- + Justify that the project intends to be engaging and novel to a particular audience
- + Take responsibility for executing the project
- + Present understandings from a scholarly perspective for a specified audience
- + Demonstrate awareness of broader implications

In terms of Conducting Scholarly Inquiry, students will learn to:

- + Articulate and refine a scholarly question
- + Follow ethical principles
- + Choose an appropriate discovery process for scholarly inquiry
- + Gather evidence appropriate to the question
- + Apply appropriate scholarly conventions during scholarly inquiry
- + Apply appropriate scholarly conventions when reporting or performing
- + Assess the validity of key assumptions and evidence
- + Situate the scholarly inquiry within a broader context

REQUIRED TEXTS

Baudrillard, J. (1983). *Simulations* (P. Beitchman & P. Foss, Trans.). Los Angeles, CA: Semiotext(e). ISBN: 9780936756028 Price: \$12.95

Dyson, G. (2012). *Turing's Cathedral: The Origins of the Digital Universe*. New York, NY: Knopf Doubleday. ISBN: 9781400075997 Price: \$16.95

McLuhan, M. & Fiore, Q. (2001). *The Medium is the Massage*. Berkeley, CA: Gingko Press. ISBN: 9781584230700 Price: \$13.95

Redmond, S. (Ed.). (2004). *Liquid Metal: The Science Fiction Film Reader*. London, UK: Wallflower Press. ISBN: 9781903364871 Price: \$24.00

REQUIRED FILMS

La Jetée | Metropolis | Dr. Strangelove | 2001: A Space Odyssey | World on a Wire | THX 1138
Brazil | Blade Runner | The Terminator | Akira | Tetsuo: The Iron Man | eXistenZ | Her | Ex Machina

[Full Filmography](#)

WATCHING FILMS

As this is will be the first film class for many of you, I'd like to include some excellent suggestions for how to watch a film 'critically' borrowed from Dr. Jessica Scarlata:

- + Give yourself a minimum of a four-hour block of time to do the screenings so that you can pause, rewind, and re-watch parts if necessary.
- + Watch with pen and paper so you can jot down notes; taking notes on your computer is less effective and actually takes longer.
- + If you miss something, rewind. Don't multitask during a film. You can't fold laundry and watch the film in the way you need to for a course at the same time.
- + Watch the whole film. I mean this in terms of duration, but I also mean it in terms of the totality of the film—you should be paying attention to mise-en-scene, cinematography, sound, and editing, as well as narrative.

COURSE ASSIGNMENTS

SHOT BREAKDOWNS

You will work in small groups over the course of the semester to break down and analyze shots from a film of your choosing. You will complete this assignment four times over the course of the semester. You can find look to the Yale Film Studies' *Film Analysis Web Site 2.0* for example analyses of [Rocco and his Brothers](#) and [Il Grido](#), which you can use as a model.

N.b., You will need to take screenshots in order to complete this assignment. Here are some instructions on how to take a screenshot on your computer ([PC Windows](#) | [Mac OSX](#)). If you are a Windows user, you might also check out the [Snipping Tool](#).

PROJECT PROPOSAL

You will be responsible for developing a well researched, 500-word proposal for your final research project. I expect that these ought to begin as much longer documents that you hone down, fighting to cut every last word out until you've whittled your way down to the maximum word count. In response to that labor, I will provide detailed feedback and offer time for individual conferences to help guide you as you develop your research agendas.

RESEARCH JOURNAL

You will be responsible for keeping detailed records of your research process which you will turn into your research journal and submit to me for review. The key components of your research journal are:

- + An annotated bibliography with ≤ 250 -word annotations of each source – including a minimum one-sentence note on its relevance for your project. Your sources for the annotated bibliography need to be carefully selected for relevance to your final project and for their credibility. Any source not deeply related to your argument or credible enough to cite in an academic setting should be rejected. The number of sources you need will vary based on the length, depth, and relevance of the sources you include. There is no magic number that will guarantee you an ‘A’.
- + You will also maintain a “reject” list of sources that you looked into but determined were not relevant or credible enough for use in your final project. This will demonstrate to me that your research has gone deeper than the sources you end up citing in your final publication.
- + Lastly, your research journal needs to include an 800-word examination of the film you have chosen to work with and the way that it is related to the research that you have been doing. You ought to explain what you have been researching, why, and where/how you have been looking for sources, as well as outline any gaps in your knowledge that you are having trouble filling.

Your research journal counts for as much of your final grade as does your final project. This is intentional. I understand the RS designation to highlight the importance of the research process, and as such, your work on developing a conscious and explicitly articulated research strategy that documents that process for future use during the writing phase is of utmost importance.

PUBLISHED ARTICLE

The final project for this course will be an academic research article of at least 2,500 words (references included) to be published in a venue of your choosing. You can choose to publish your paper anywhere that is publicly accessible. I would recommend [Medium](#) as a default option, but would highly encourage students to pursue professional publications through Students as Scholars or in research journals that accept undergraduate submissions. I will provide you with (likely too much) information about these options during the course.

CRITICAL ANALYSIS

Prior to our exam period for the course you will be provided with links to access the published articles of each of your classmates. You will be given a day and a half prior to the exam to review your classmates' publications and select one to develop a critical response to. During the final exam period, you will draw on your research from this semester to craft a critical response to *one* of these articles and publish your response either as a comment on their article or as an independent article. I will then share these critical responses with the class.

PARTICIPATION

Participation is crucial in this class because we will rely on in-class discussion to facilitate our analyses of the course texts. It is my hope that you will learn as much (or more) from each other as you will from me. It is for this reason that participation will account for twenty percent of your final grade.

Class participation means more than how much you say in class; it's your effort to be present—both in mind and in body—in our discussions. Your grade will reflect your attendance, preparation, and the quality of your contributions to our class work. Accordingly, participation grades will be awarded as follows:

In order to earn an average participation grade (in the C range), you must fulfill four basic requirements: arrive on time; be ready to discuss readings when called on; be prepared with the book or reading in class; listen respectfully.

To earn a B, you must consistently fulfill the above requirements and: volunteer questions or points of interest from readings to generate discussion; willingly offer ideas in class; make sure your contributions are topical and thoughtful.

To earn an A, you must consistently fulfill the above criteria and: show leadership in class discussion (i.e. respond to open-ended questions, challenge received opinion, ask difficult questions); respond to other students' ideas (not just mine) by asking questions or building on their points.

You will receive a failing participation grade if you are excessively and/or frequently tardy; unprepared for class; disruptive during class; and/or occupied with activities other than those related to our class.

DUE DATES AND DISTRIBUTION

09/18	Shot Breakdown #1	5%
10/02	Shot Breakdown #2	5%
10/23	Shot Breakdown #3	5%
11/20	Shot Breakdown #4	5%
10/16	Project Proposal	10%
11/13	Research Journal	25%
12/16	Final Article Published	25%
12/18	Critical Analysis	10%
–	Participation	10%

GRADING SCALE

A-	90–93	A	94–96	A+	97–100
B-	80–83	B	84–86	B+	87–89
C-	70–73	C	74–76	C+	77–79
F	>64	D	64–66	D+	67–69

COURSE SCHEDULE

I will maintain a detailed [Daily Schedule](#) for the course via Google Docs. I will post all of your readings and assignments here, including links to PDFs or WEB versions of any texts not contained in the required texts for the course.

This course is designed to be malleable to the research interests of its students and thus to accommodate diverse research agendas. As such, I reserve the right to alter the Daily Schedule at any point during the semester, provided I do so a minimum of *seven days* before any given assignments are due or readings are to be completed. Additionally, I will commit to not significantly increasing the amount of work for any given week, and thus any changes I make are likely to be *substitutions* of one article for another that I think will be more useful or relevant for us as a class.

I will include a condensed version of our schedule here:

Week 1 – Introduction to the Course

Week 2 – No Class (Labor Day)

Week 3 – Fritz Lang’s *Metropolis* and Science Fiction Film as a Genre

Week 4 – Stanley Kubrick’s *Dr. Strangelove* and Atomic Bomb Cinema

Week 5 – Stanley Kubrick’s *2001: A Space Odyssey* and Artificial Intelligence

Week 6 – Rainer Werner Fassbinder’s *World on a Wire* and Virtual Simulations

Week 7 – George Lucas’s *THX 1138*, Special Effects, and the Problem of the Real

Week 8 – Terry Gilliam’s *Brazil* and the Dystopic Power of Bureaucracy

Week 9 – Ridley Scott’s *Blade Runner* and Urban Cyborgs

Week 10 – James Cameron’s *The Terminator* and the Future of Military Machines

Week 11 – Katsuhiro Otomo’s *Akira* and the Extension of the Body

Week 12 – Shinya Tsukamoto’s *Tetsuo: The Iron Man* and the Transhuman

Week 13 – David Cronenberg’s *eXistenZ* and Posthuman Embodiment

Week 14 – Spike Jonze’s *Her* and the Disembodiment of the Singularity

Week 15 – Alex Garland’s *Ex Machina* and Gender and Race in Robotics

COURSE POLICIES

ATTENDANCE

As per GMU Academic Policies: “Students are expected to attend the class periods of the courses for which they register. In-class participation is important not only to the individual student, but also to the class as a whole.” Attendance is particularly crucial in a discussion-based course.

Unexcused absences will be negatively factored into participation grades. Any student with more than two unexcused absences will receive a failing participation grade for the course.

Students may arrange for excused absences which will not be factored into participation grades as per GMU Academic Policies on Registration, Attendance and Grading. In these instances, it will be the responsibility of the student to provide as early advance notice as possible and to arrange to make up any missed work.

TARDINESS

If you are more than 10 minutes late, you will be counted as absent. If you are tardy, it is your responsibility to catch up with the rest of the class. I will not repeat the instructions delivered at the beginning of classes for the benefit of tardy students. Furthermore, students leaving class early will also be counted as tardy.

LATE WORK

All assignments must be submitted to me by the provided deadlines. I reserve the right to refuse to accept, grade, and comment on any assignments submitted late. That being said, if you contact me in advance about any problems you are having getting a particular assignment in on time *before the deadline*, I can usually work out an extension for you. I do, however, reserve the right to refuse any given extension on a case by case basis.

EMAIL POLICY

My response to your emails will not be immediate. Please budget at least one business day for a response to any given email. This means you need to plan in advance if you are going to contact me with time sensitive questions or concerns.

Additionally, students must use their MasonLive email account to receive important University information, including communications related to this class. I will not respond to messages sent from or send messages to a non-Mason email address.

NON-DISCRIMINATION POLICY

Discrimination on the basis of race, color, religion, national origin, sex, disability, veteran status, sexual orientation, gender identity, age, marital status, pregnancy status or genetic information is a violation of state and federal law, as well as George Mason University's Non-Discrimination policy, and *will not be tolerated*. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) similarly *will not be tolerated*. Retaliation against any person who complains about discrimination is prohibited.

We will be dealing with complicated and often disconcerting aspects of race, color, religion, sex, disability, sexual orientation, gender identity, age, pregnancy status and genetic information in this course. Students will not be punished for engaging in these themes openly and honestly, so long as they demonstrate a good faith effort towards inclusivity and sensitivity to otherness.

ACADEMIC INTEGRITY

Mason is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean for this course? Essentially this: when you are responsible for a task, you will perform that task. When you do rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives and traditions. When in doubt (of any kind) please ask for guidance and clarification.

DISABILITY ACCOMMODATIONS

If you have a documented learning disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Services (<http://ods.gmu.edu>, SUB 1, Room 4205, (703)993-2474) to determine the accommodations that you need; and 2) talk with me to discuss your accommodation needs.

UNIVERSITY POLICIES

The University Catalog (<http://catalog.gmu.edu>) is the central resource for university policies affecting student, faculty, and staff conduct in university affairs.

OTHER RESOURCES

WRITING CENTER: A114 Robinson Hall, (703) 993-1200, <http://writingcenter.gmu.edu>

UNIVERSITY LIBRARIES' "Ask a Librarian": <http://library.gmu.edu/mudge/IM/IMRef.html>

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): (703) 993-2380,
<http://caps.gmu.edu>

APPENDICES

FILMOGRAPHY

- Dauman, A. (Producer), & Marker, C. (Director). (1962). *La Jetée* [Motion picture]. France: Argos Films & Radio-Télévision Française (RTF).
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- Kubrick, S. (Producer), & Kubrick, S. (Director). (1964). *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb* [Motion picture]. U.S.A. & U.K.: Columbia Pictures Corporation & Hawks Films.
- Kubrick, S. (Producer), & Kubrick, S. (Director). (1968). *2001: A Space Odyssey* [Motion picture]. U.S.A. & U.K.: Metro-Goldwyn-Mayer (MGM) & Stanley Kubrick Productions.
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- Sturhahn, L. (Producer), & Lucas, G. (Director). (1971). *THX 1138* [Motion picture]. U.S.A.: American Zoetrope & Warner Bros.
- Milchan, A. (Producer), & Gilliam, T. (Director). (1985). *Brazil* [Motion picture]. U.S.A. & U.K.: Embassy International Pictures, Brazil Productions, 20th Century Fox, & Universal Pictures.
- Deeley, M. (Producer), & Scott, R. (Director). (1982). *Blade Runner* [Motion picture]. U.S.A.: The Ladd Company, Shaw Brothers, Blade Runner Partnership, & Warner Bros.
- Hurd, G. A. (Producer), & Cameron, J. (Director). (1984). *The Terminator* [Motion picture]. U.S.A.: Hemdale, Pacific Western Productions, Cinema '84, & Orion Pictures.
- Suzuki, R. & Katō, S. (Producers), & Otomo, K. (Director). (1988). *Akira* [Motion picture]. Japan: Tokyo Movie Shinsha & Toho.
- Tsukamoto, S. (Producer), & Tsukamoto, S. (Director). (1989). *Tetsuo: The Iron Man* [Motion picture]. Japan: Kaijyu Theatres.
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- Macdonald, A. & Reich, A. (Producers), & Garland, A. (Director). (2015). *Ex Machina* [Motion picture]. U.S.A. & U.K.: Film4, DNA Films, & Universal Pictures.

BIBLIOGRAPHY

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