

The University of Arizona
ASTR 325: Science and Science Fiction
Dr. Richard L. Poss
Fall 2022

Description:

This course uses science fiction narratives to stimulate discussion and argument about future advances in science and what those advances might do to society. Changes brought on by science and technology have social, political, psychological, spiritual, and philosophical dimensions, and may involve aspects of race, gender, social class, and the construction of personal identity. We will try to come to an understanding of science fiction as a modern art form intimately involved with humanity's progress in science and technology. Students should be aware that a great deal of reading is required in this course. Classroom sessions will be a combination of lecture and discussion, and may include demonstrations and short videos. Participants will study the materials first, and then we will discuss them in class. There will be reading quizzes, mid-term exams, a final exam, small writing assignments, and a research project.

Required Texts:

Orson Scott Card, ed., *Masterpieces: The Best Science Fiction of the Twentieth Century*.

Ace Paperbacks, 2001. ISBN: 0-441-01133-0.

Arthur C. Clarke, *Childhood's End*. Del Rey, 2016. ISBN: 978-0-345-34795-4.

D.G. Hartwell, and K. Cramer, Editors, *Year's Best SF 14*. EOS/HarperCollins, 2009. (On D2L).

Course Outline: *(This class meets Tues/Thur from 11 to 12:15, in Steward 204)*

Tues. Aug. 23	Introduction and Overview: What can we expect from this class? What is Science Fiction? Scientific Method. SF vs. Fantasy.
Thurs. Aug. 25	Case Studies: John Kessel, "A Clean Escape." Case Studies: Anne McCaffrey, "The Ship Who Sang."
Tues. Aug. 30	Origins: A Short History of Science Fiction. Jules Verne. H.G. Wells.
Thurs. Sept. 1	The Golden Age: Asimov, Heinlein, Clarke, Bradbury. Poul Anderson, "Call Me Joe."
Tues. Sept. 6	Robert A. Heinlein, "All You Zombies." Ray Bradbury, "Dark They Were, and Golden-Eyed."
Thur. Sept. 8	Isaac Asimov and Robotics: "Robbie." "Robot Dreams."
Tues. Sept. 13	Arthur C. Clarke, <i>Childhood's End</i> .
Thur. Sept. 15	Arthur C. Clarke, <i>Childhood's End</i> .
Tues. Sept. 20	Writing Prompts
Thur. Sept. 22	Writing Prompt, Revisions.

Tues. Sept. 27	Daniel Keyes, “Flowers for Algernon.” James Blish, “A Work of Art.”
Thur. Sept. 29	Feminist Science Fiction: Joanna Russ, Octavia Butler, Pat Cadigan. James Tiptree, Jr., “The Women Men Don’t See.”
Tues. Oct. 4	Ursula K. Le Guin, “The Ones Who Walk Away From Omelas.”
Thur. Oct. 6	Joanna Russ, “Towards an Aesthetic of Science Fiction.” Exam #1.
Tues. Oct. 11	Magazines: <i>Asimov’s</i> , <i>Analog</i> , <i>MFSF</i> . <i>Clarkesworld</i> . <i>Lightspeed</i> .
Thur. Oct. 13	<i>Locus</i> . Larry Niven, “Inconstant Moon.” Ted Chiang, “Exhalation.”
Tues. Oct. 18	Paolo Bacigalupi, “Pump Six.” Terry Bisson, “They’re Made Out of Meat.”
Thur. Oct. 20	Michael Swanwick, “The Scarecrow’s Boy.” Neil Gaiman, “And Weep Like Alexander.”
Tues. Oct. 25	Robert Silverberg, “Passengers.” Ted Chiang, “What’s Expected of Us,”
Thur. Oct. 27	Environmental Fiction, Eco-fiction, and Cli-fi. The Science in Science-Fiction Movies: <i>Arrival</i> . <i>Ex Machina</i> . <i>The Martian</i> .
Tues. Nov. 1	<i>Interstellar</i> . <i>Passengers</i> . <i>Bladerunner 2049</i> .
Thur. Nov. 3	TV Series: <i>Black Mirror</i> , <i>Humans</i> , <i>Continuum</i> . <i>Travelers</i> , <i>Orphan Black</i> , <i>Dr. Who</i> .
Tues. Nov. 8	Exam #2.
Thur. Nov. 10	Manuscript Formatting and Submission. Sue Burke, “Spiders.”
Tues. Nov. 15	Afro-futurist science fiction. Writing vs. Revising. Kathleen Ann Goonan, “Memory Dog.”
Thur. Nov. 17	Elizabeth Bear and Sarah Monette, “Boojum.” Neil Gaiman, “Orange.”
Tues. Nov. 22	Science Fiction on YouTube and Social Media.
Thur. Nov. 24	<i>Thanksgiving Holiday – No Classes.</i>
Tues. Nov. 29	Student Presentations
Thur. Dec. 1	Student Presentations
Tue. Dec. 6	Review and Evaluation. Projects Due.
Reading Day:	Thursday, December 8, 2022 – No Classes.
Final Exam:	Tuesday, December 13, 10:30 to 12:30, Steward 204.

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Class Meets: 11:00 to 12:15, Steward Observatory 204
Instructor: Dr. Richard L Poss
Office: Steward Observatory 212
Email: rposs@arizona.edu
Telephone: 621-8630
Office Hours: 2:00 to 2:50pm Tues./Wed., and by appointment.
 Online Office Hours on Zoom, TBA.

CLASS POLICIES:

CLASS PARTICIPATION: It is important to keep up with the day-to-day assignments, preparing the topic **before** class. Try to marshal your thoughts (favorable or unfavorable) about the material before class. Then argue your point of view in class. **You are encouraged to get to know each other during the semester, and to study “together” if possible.**

ATTENDANCE: Regular attendance is important. Your participation in discussions is important, and is taken into consideration in preparing your final grade. In addition, the exams and paper topics are all geared to class discussion.

GRADING: Your grade is based on the two exams, the paper, the final exam, participation in class discussions, and writing exercises. You will be expected to make a brief presentation to the class on the subject of your term project.

Exam #1	20 %
Exam #2	20 %
Term Project	20 %
Final Exam	20 %
Writing Prompts, Class Participation, Quizzes, etc.	<u>20 %</u> 100 %

COURSE LEARNING OUTCOMES:

Upon completion of this course, students will be able to:

- understand the nature and application of scientific method.
- apply ideas and processes beyond the classroom.
- recognize the complexity of scientific issues and their role in culture.
- speak and write about scientific and technological advances, and how they interact with social, historical, and political issues.
- appreciate different critical approaches to the interpretation of science and technology.
- critically analyze and appreciate the origin and development of the science fiction genre from its origins in Jules Verne to the current day.
- speak and write critically about science fiction themes from written literature, movies, television, YouTube videos, and social media.

LIVE AND “IN – PERSON”:

This course will have a regular meeting time when we will gather and meet “in person.” PowerPoint slides will be uploaded to D2L after the class session. We will try to make arrangements for those times when you cannot be at class, but remember that the core of the course takes place during the live class sessions.

ZOOM MEETINGS: We may have Zoom office hours (in addition to regular in-office ones) depending on student interest. The Zoom environment has some advantages, especially in the area of revising and editing manuscripts.

CONDUCT: *No laptops are allowed during class sessions.* No smart phones, Ipads, tablets, texting or cell phones are allowed during class. Social media is the biggest distraction to those around you. Refrain from social media during class. Cell phones should be turned off when class begins. When another student is speaking to the class, please give them your attention. You are expected to treat your fellow students with dignity and respect. The use of personal electronics such as laptops, iPads, and other such mobile devices is distracting to the other students and the instructor. Their use can degrade the learning environment. Therefore, students are not permitted to use these devices during the class period.

NOTIFICATION OF OBJECTIONABLE MATERIALS: This course will contain material of a mature nature, which may include explicit language, depictions of nudity, sexual situations, and/or violence. The instructor will provide advance notice when such materials will be used. Students are not automatically excused from interacting with such materials, but they are encouraged to speak with the instructor to voice concerns and to provide feedback.

UA NONDISCRIMINATION AND ANTI-HARASSMENT POLICY: The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>. Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

INTEGRITY: Absolute academic integrity is expected of every student in all academic activities. All students are expected to be aware of and follow the *University of Arizona Code of Academic Integrity*. The *Code* prohibits all forms of academic dishonesty, including cheating, plagiarism, and fabrication. The repercussions for all of those found guilty of violating the *Code* will include loss of credit for the work (grade=0) and may include failure of the course or more extreme measures.

PLAGIARISM: Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Written work must be *your own thoughts*. “Double-dipping,” (turning in a paper you wrote and used in a previous class), is not permitted. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

CODE OF CONDUCT: *Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor’s express written consent.* Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

CLASS RECORDINGS:

For lecture recordings, which are used at the discretion of the instructor, students must access content in D2L only. Students may not modify content or re-use content for any purpose other than personal educational reasons. All recordings are subject to government and university regulations. Therefore, students accessing unauthorized recordings or using them in a manner inconsistent with UArizona values and educational policies are subject to suspension or civil action.

STUDENTS WITH DISABILITIES: Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit <http://drc.arizona.edu>.

EXCUSED ABSENCES: All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion. Absences pre-approved by the UA Dean of Students (or Dean's designee) will be honored.

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at <http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable: <http://policy.arizona.edu/human-resources/religious-accommodation-policy>.

Absences preapproved by the UA Dean of Students (or dean's designee) will be honored. See <http://policy.arizona.edu/employmenthuman-resources/attendance>.

THREATENING BEHAVIOR: The University prohibits threatening behavior, which it defines as "Any statement, communication, conduct or gesture, including those in written form, directed toward any member of the University community that causes a reasonable apprehension of physical harm to a person or property." The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. For more information, see <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

MISSED TESTS: The exams are already scheduled and posted on the class schedule. If you know that you will miss a test, you must make arrangements for an oral exam at a time and date *prior to* the written test. Missing one of the midsemester exams is an automatic loss of 20% of your grade. Missing the final is a loss of 20%.

GRADES: You have one week from the time an exam is returned to challenge any perceived errors. Although rare, there are occasions when grading errors occur, and you should review your returned work.

INFORMATION contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

ACADEMIC ADVISING: If you have questions about your academic progress this semester, please reach out to your academic advisor (<https://advising.arizona.edu/advisors/major>). Contact the Advising Resource Center (<https://advising.arizona.edu/>) for all general advising questions and referral assistance. Call 520-626-8667 or email to advising@arizona.edu.

LIFE CHALLENGES: If you are experiencing unexpected barriers to your success in your courses, please note the Dean of Students Office is a central support resource for all students and may be helpful. The [Dean of Students Office](#) can be reached at 520-621-2057 or DOS-deanofstudents@email.arizona.edu.

PHYSICAL AND MENTAL-HEALTH CHALLENGES: If you are facing physical or mental health challenges this semester, please note that Campus Health provides quality medical and mental health care. For medical appointments, call (520-621-9202. For After Hours care, call (520) 570-7898. For the Counseling & Psych Services (CAPS) 24/7 hotline, call (520) 621-3334.

COVID – 19 ISSUES: Visit the webpage “covid19.arizona.edu” for regular updates.