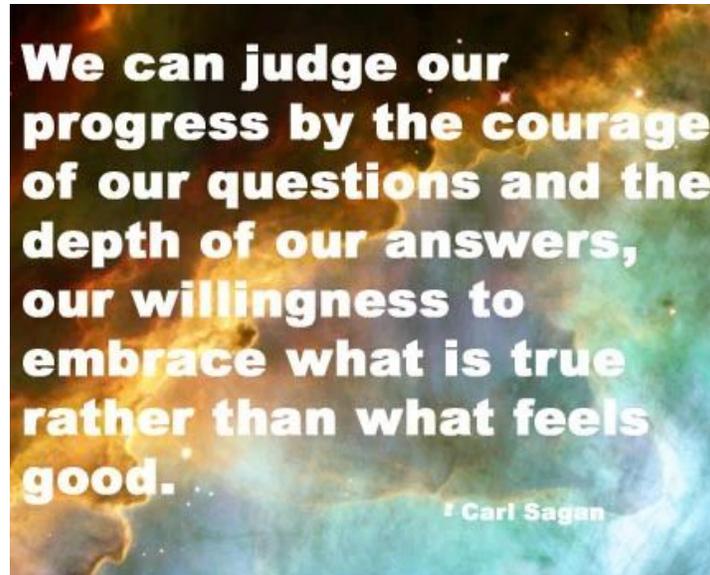


Science Fiction, Science Fact

Fall 2018 - FYS 048

Tuesdays & Thursdays 3:30-4:45

Collier-Scripps 235



Professor Dan Chibnall

STEM Librarian & Assistant Professor of Librarianship

Email: dan.chibnall@drake.edu

Office Hours: Mondays 2-4, Wednesday 10-12, & by appointment
Main Floor West Side, Cowles Library

About

First Year Seminars at Drake help integrate students into academic culture; sharpen students' writing, critical thinking, verbal communication and information literacy skills; encourage active participation by students in class; invite connections among several areas of study or disciplines; and aim to establish a sense of community among members. [Learn more here.](#)

Course Description

Science fiction storytelling often predicts scientific achievements, warns of darker scientific efforts, illuminates facts in the face of pseudoscience, and helps us navigate social problems. We will use science fiction stories and films to understand scientific principles and achievements, separate facts and falsehoods, and explore our future for scientific discoveries. We will also learn how to communicate scientific concepts more clearly, value the different

formats of public science & science journalism, and explore deeper questions about “forbidden knowledge” and the scientific method.

As this is an FYS course, we will be focusing on strengthening your skills when it comes to reading, writing, and researching. Each class period will be an opportunity for us to try working on a new skill or improving an old one.

Course Outcomes

By the end of course, you will be able to:

- Recognize quality scientific writing and important themes within science fiction writing
- Demonstrate an ability to critically think about and make connections between ideas in past narratives or research to ideas in current research and society
- Explain how science fiction media can be a teaching tool to understand scientific concepts and other social issues
- Discover new methods of writing and presenting scientific and social concepts and issues to improve your own ways of thinking
- Analyze themes in science fiction media that help you to understand science and social issues on a deeper level rather than just a surface understanding
- Evaluate outside ideas and research to help build stronger arguments

Required Readings

- *The Martian* by Andy Weir
- All other readings, films, and tv shows that we will analyze for class will be provided through BlackBoard, on reserve at Cowles Library, or available through an online streaming service. **You are responsible for having access to a Netflix account in order to watch the Black Mirror episodes.** You can watch the episodes in a group if you so choose.

Required Films & TV Shows:

Films are available on DVD reserve at Cowles Library for 4-hour checkout. Many are also available to stream on Netflix or Amazon, including the episodes of *Black Mirror*. Students are responsible for viewing films and shows before class. Feel free to organize group screenings with your classmates. If you want to use classroom space in Cowles Library, I'm happy to arrange it if space is available at your desired time(s). I will also try to offer a group screening of each film in the Harvey Ingham auditorium if our schedule allows for it.

Grading & Assignment Descriptions

This course uses outcomes-based grading. You begin the course with zero points and earn points through quality work throughout the semester. Here are the assignments you will turn in to earn your grade. **All assignments should be turned in on BlackBoard unless otherwise indicated by the instructor.**

This is a ***tentative*** list of assignment values (see below the grading scale). The total may change slightly depending on classroom projects and your overall progress throughout the semester. **Most importantly, remember that I do not give grades. You earn your grade.** This course utilizes plus/minus grading. Here is the breakdown. Please **check the BlackBoard gradebook frequently** so you know what your current grade is.

A+: 97.5-100%

A: 92.5-97.4%

A-: 90-92.4%

B+: 87.5-89.9%

B: 82.5-87.4%

B-: 80-82.4%

C+: 77.5-79.9%

C: 72.5-77.4%

C-: 70-72.4%

D+: 67.5-69.9%

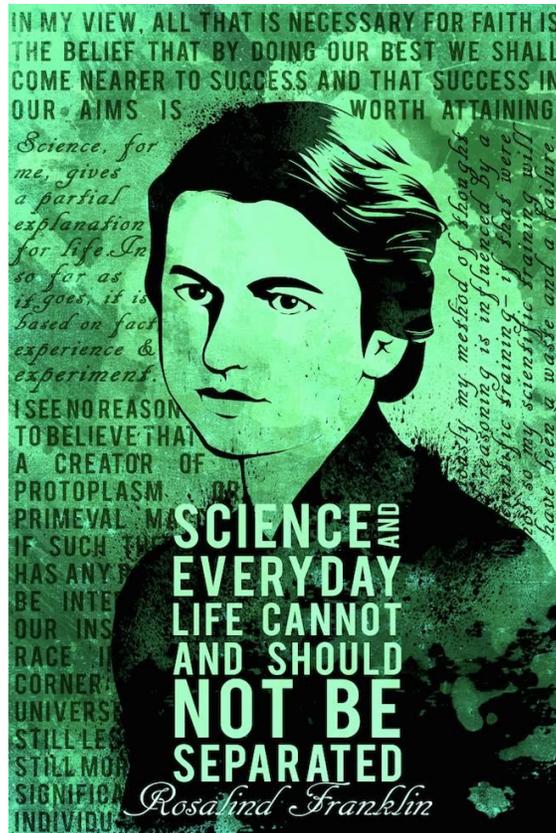
D: 60-67.4%

F: 59.9% or lower

- **Short-to-Medium Length Writing Assignments (10-20 points each)**
 - These are everyday responses, comparisons, applications, and analyses of different science fiction and science media that we will read or watch and discuss. One of the most important skills we'll work on in this course is writing. This will require you to gradually improve your writing style by trying your hand at writing various essays. These essays will ask you to think about how science fiction has predicted science achievements, what science fiction can do for us as a society moving forward, and how to analyze literature and other ideas in our day-to-day conversations.
 - **These assignments will be added to our course calendar on a weekly basis.**
 - Each week we will have readings, films, or tv episodes that will help to foster discussion and learning on our topics during class. It is vital that you come to class prepared, having done the reading, and either turning in the writing assignment for that day or being prepared to write during class. This will help us build our critical thinking skills and help to improve your writing. Remember: good writing is good thinking.
 - We will workshop or tackle a project or activity during each class to try and practice a skill. These will be worth small amounts of points but they will add up over the course of the semester.
- **Conversation with Dan (10 points)**
 - I will ask you to sign up for a time, either one-on-one, or with one or two other students from class, to come and meet me in the library to have a conversation

about our course, college in general, and just getting to know you.

- **Cultural Events (10 points x 2)**
 - Drake offers a variety of amazing opportunities to learn outside the classroom. You will attend at least two cultural celebrations or other special events during the fall semester and turn in a brief write-up of your experience, what you learned, and how that new knowledge might change the way you think or approach ideas.
- **Pseudoscience Analysis (25 points)**
 - One key topic that we will focus on later in the semester is pseudoscience. How do we draw a line between something that is scientific and something that isn't? You'll choose a pseudoscience topic and use your critical thinking skills to analyze it and break it down.
- **Current Events Analysis (25 points)**
 - Staying on top of science current events is one way to keep your information literacy skills sharp. We will discuss science current events from time to time and I will ask you to pick something from the news, dissect it using tools we've learned in class, write about it, and be ready to discuss it during class.
- **Proposal, Research Journals, & Draft (25 points each x 4)**
 - These assignments are components of the final science fiction analysis project. Early in the semester you will submit your idea proposal to me and I'll give you feedback. We'll continue that process with the two research journals and a draft of your final project. This allows me to see how you are progressing, to give you constructive criticism, to allow you to make revisions, to allow you to improve your writing & thinking, and to keep you on track for your final project and presentation.
- **Final SciFi Analysis Project (100 points)**
 - You will work on this project in stages over the course of the semester. You have some latitude in what you want to focus on (stories, movies, books, shows, graphic novels) and what kinds of theme(s) and science you want to analyze. The goal with this project will be to show that you can analyze texts for deeper meaning, connect ideas across time, and use outside sources to build a stronger argument.



Classroom Expectations

We meet for 75 minutes each class period, twice a week and in that time I want you to be engaged listeners and active participants in the class. Sure, I'll talk a little, give examples, but I like to ask questions often to get your minds moving. I'm also a firm believer in active learning, which means that every class will involve some kind of micro-project or group-based investigation. We learn more when we are experimenting and acting rather than just listening all the time.

Remember that when you are in the classroom, you can safely discuss controversial topics, think in a critical way, and challenge yourself and others. We want to engage lots of perspectives and begin the vital task of changing the way we think. **Good learning starts by unlearning previous ways of thinking.**

I want you to use your technology during class, be it laptop, tablet, or smartphone. Just remember that you are expected to be a responsible learner, which means that you should stay focused on class-related topics when using your technology. Most importantly, do not distract your classmates with your technology. We are here to learn, not to be distracted. **This is one of the most important skills you can develop in college: learning to focus and stay on task when you need to.**

I will also provide you with a copy of our course contract which spells out how we will respect

each other over the course of the semester so that we are always learning and not being distracted.

Course Policies

You are responsible for your learning and progress in the course. This includes committing to being an active participant in the class, knowing when assignments are due, turning work in on time, and asking for help when you need it. It will take different students different amounts of time to successfully complete the reading and assignments. Plan accordingly.

Email & BlackBoard

I will mainly use the BlackBoard announcement tool to inform you of any changes that may take place or reminders about upcoming classes and assignments. Make sure to check your email and BlackBoard frequently to stay on top of your studies. One of the best skills you can develop in your first semester is staying on top of communications.

Office Hours

Office hours should be utilized for conversations about ideas from class, problems with research, or other, deeper, critical thinking conversations. If you believe your question can be answered by checking the syllabus, calendar, or BlackBoard, make sure to check those first. I welcome all students to drop by my office as I have my door open most of the time, but please remember I have many responsibilities and courses so I may not always be available. Feel free to drop by on **Mondays from 2-4pm and Wednesdays from 10-12** unless I otherwise tell you about a conflict that week during class. **I will also let you know every class period if I have extra office hours for that week. I'll expect you to utilize office hours once before and once after fall break.** This helps me to find out how you're progressing. My office is Cowles Library 137 on the main floor. Feel free to contact me to make an appointment at another time if you need to as well. Most importantly: don't feel nervous about coming to see me. I'm here to help guide you, not to judge you.

Attendance & Missing Class

If you are going to miss class, please email me to let me know before class. You are responsible for what you miss during class, and in-class work will not always be available to make up. You'll need to contact someone in the class to get notes and any information you missed. I strongly suggest you let someone in the class know you can't come to class and ask that person to gather information for you. Attendance is important for us to have a lively, multi-perspective discussion. **You are allowed 3 unexcused absences. After those 3 you will lose 5% off of your final grade for every unexcused absence. An excused absence must be accompanied by a note from a coach, professor, family member, or doctor.**

And remember: if you write to me after missing class, never ask the question, "Did I miss anything?" because the answer will always be "yes."

Late Work

All work must be turned in on time. Each day that an assignment is late loses 20%. After 5 days, it is worth 0%. If something is due on Tuesday and you turn it in on Wednesday, the highest

score you can get is an 80%, on Thursday a 60%. **See me for extensions or alternative due dates if needed. I will not always be able to give you an extension or alternative due date, but I will consider it based on that particular situation.** Unless otherwise indicated, assignments are due by the beginning of the class period as noted on the syllabus or by me during class.

Assignments must be turned in via BlackBoard. BlackBoard is the preferred method as that is how I can give you the quickest feedback on an assignment. Assignments should not be emailed, faxed, etc. unless special circumstances occur.

Revising

If you want to put in extra time and work to improve a graded assignment, you may make revisions based on my feedback and re-submit for a higher grade. You may only do this once per assignment. This does not count for in-class assignments. You must do this within 48 hours of my commenting/grading via BlackBoard.

Academic Integrity

Plagiarism, including self-plagiarism, is a serious offense and will not be tolerated. Assignments found to be partially or fully plagiarized will not receive credit and must be reported to the university administration. Students are responsible for knowing and abiding by university policies on plagiarism and academic integrity.

Disability Accommodations

If you have a disability and *may* require academic accommodations in this course, even if you don't anticipate using them, please arrange them during the first week of class. Accommodations must be coordinated through Student Disability Services. Please contact Michelle Laughlin, Director of Student Disability Services, at (515) 271-1835 or michelle.laughlin@drake.edu as soon as possible.

Title IX Resources - Reporting of Conduct

The University has resources available for students who have experienced sexual or interpersonal misconduct, which can include sexual harassment, sexual assault, dating violence, and stalking, for example. Some resources are legally confidential, which means personal information will not be shared with anyone else. Other non-confidential (yet still private) resources can explain how to locate support resources, file a complaint within the university, or file criminal charges – these non-confidential resources need to share incidents of sexual and interpersonal misconduct with the Title IX Coordinator.

As an instructor, I am non-confidential; however, please know that sharing with the university does not mean the individual must participate in a formal university or criminal process; an individual could request confidentiality through the University, for example. Other services the university can provide include safety planning, counseling, disability or immigration services and assistance in academic and housing accommodations as needed.

University contacts:

- Resources and reporting options [can be found on the Title IX webpage at](#)

www.drake.edu/titleix.

- Violence Intervention Partner (V.I.P.) provides peer-based 24/7 confidential support and advocacy services. To access a V.I.P. advocate call or text 515-512-2972.
- Katie Overberg, Title IX Coordinator: 271-2982 or titleix@drake.edu

Writing Workshop

The Writing Workshop can help you with: evaluating your habits of reading and writing; learning new strategies appropriate for a particular writing or reading task; making sense of assignments and assigned reading material; coming up with ideas; revising sentence style; resolving problems with word choice, grammar, etc.; revising organization, argument, viewpoint or perspective; and overcoming writer's block. You may visit a tutor by appointment or establish a time to meet a tutor on a regular basis. [Feel free to schedule an appointment by clicking here.](#)

I strongly encourage you to make an appointment with the Writing Workshop for at least one of your bigger writing assignments. Asking for writing advice is always a good idea and not a sign of weakness in any way.

Course Calendar

I reserve the right to make changes and add/subtract material to the course calendar based on various determinations during the semester. I encourage you to [bookmark the Drake academic calendar as well](#) so you know the important dates for all of your academic needs.

<u>Date & Topic/Skills</u>	<u>Reading or Watching Before Class</u>	<u>Assignment Due by Start of Class</u>
8/28 What is Science? What is Scifi?	None	None
8/30 College Level Reading & Discussion	Asimov - The Feeling of Power Asimov - The Last Question	Write-Up #1
9/4 SciFi & SciFact: Prediction, Inspiration, Warning	Octavia Butler "The Evening and the Morning and the Night"	Write-Up #2
9/6 Critical Thinking	"The Big Kill" by Elizabeth Kolbert	
9/11 Bloom's Taxonomy	The Martian 1-64	Write-Up #3

9/13 College Level Notes	Black Mirror 1 The Entire History of You & Nosedive	Project Proposal
9/18 Good Writing is Good Thinking	The Martian 65-131	
9/20 Movie Discussion #1	WALL-E	Write-Up #4
9/25 Building Arguments	The Martian 132-191	Write-Up #5
9/27 Information Ecosystems	Black Mirror 2 Men Against Fire & Arkangel	
10/2 Scientific Method	The Martian 192-256 Up to Sol 380	Research Journal 1
10/4 Dan at Professional Conference	No Class	No Class
10/9 Diversity in SciFi	The Martian 257-310 Sol 497 or Ch. 23	
10/11 Science: The Dark Side	"The Screwfly Solution" by James Tiptree Jr.	Write-Up #6
10/16 Fall Break	No Class	No Class
10/18 Logical Fallacies	The Martian 311-369	
10/23 The Men & Women of Scifi	"The Lady Astronaut of Mars" by M.R. Kowal	Research Journal 2

10/25 Movie Discussion #2	Movie #2	
10/30 Open Discussion Day		
11/1 Pseudoscience: Separating Fake & Real	Primary & Secondary Science Articles	
11/6 Integrating Ideas	Black Mirror 3 San Junipero & Hang the DJ	Draft
11/8 Public Science & Engaged Citizenship	Best American Scifi 2017 or Wesleyan Anthology	
11/13 Current Events	Bring your own news article to class	
11/15 Creating Our Own SciFi	Essays from Best Science & Nature Writing	
11/20 Getting Wacky with Science & SciFi	Xkcd Comics & What If?	Final Project Due
11/22 Thanksgiving	No Class	No Class
11/27 Open Discussion Day		
11/29 Movie Discussion #3	Movie #3	
12/4 Presentations		Presentations
12/6 Presentations		Presentations

