## Prof. John Gainer, Adjunct Faculty, Villanova University

Course: Hacking Our Futures: Technology, Media, and its Cultural Construction

### **Course Description**

Proposals to colonize Mars, the rise of automated vehicles, the use of memes to manipulate global economics. What are the cultural impacts of these new technologies? Who benefits and who falls behind with the rapid development of modern media and technology? How has everyday life fundamentally changed with each new advancement?

The goal of this course will be to critically analyze and relate the material found in the young adult sci-fi novel *Feed* by M.T. Anderson, as well as numerous other popular and scholarly pieces of work (both through in-class reading and video analysis), to the lives of youth today. It is clear that there is no small amount of anxiety and wonder that guides the current attitudes of humans in relation to technology and media. Through in-class discussion we will attempt to piece together an understanding as to what the interconnections between media, technology, and the self are. More specifically, we will examine technological innovation as it pertains to pressing topics such as; social media and its users, how to deal with climate change and technological innovation, and in what ways technological development and its implementation can shape cultural ideas about race and gender.

This course is meant to help those interested in not just the STEM disciplines, but anyone who is interested in thinking more broadly about the technologies we use today and how they come to shape who we are in the future.

## **Course Objectives**

#### Students will learn:

- How critical concepts are shaped and applied within social science research surrounding media, technology, and culture.
- How power, politics, and cultural identity are shaped through the development of new scientific developments and devices.
- Experience writing collegiate-level papers that incorporate critical concepts, reasoning, and real-world evidence.
- The possibilities for policy-making that shapes, and are shaped by everyday people.

#### Required text for the course:

### Provided texts for in-class reading:

Ursula K. Le Guin – *A Rant About "Technology"* [http://www.ursulakleguin.com/Note-Technology.html]

Andy Clark - Natural Born Cyborgs, Introduction

Amit Katwala – *The spiralling environmental cost of our lithium battery addiction* <a href="https://www.wired.co.uk/article/lithium-batteries-environment-impact">https://www.wired.co.uk/article/lithium-batteries-environment-impact</a>

# **Learning Activities & Assignments**

The course will be broken up into five distinct units of in-class activity. Additionally, each day will consist of relating the assigned pages of *Feed* to that day's activity. Two students (working separately) will be responsible for initiating the class discussion. All readings should be completed before the assigned date, and you should come to class prepared to discuss.

Unit One: "Technology and Emotions" Pages 3 - 75, "Moon" Feed

This introductory exercise will involve analyzing the thoughts and feelings of the beginning chapters of *Feed*. Students will be asked to complete two brief timed writing assignments in which they will attempt to define the overarching mood or emotion that defines their generation. Within the book, multiple psychological and emotional decisions are made in relation to the technologies used in the future. How has media and technology either shaped or guided our *moods* of today? Why does this mood or emotion specifically affect your generation and not others? You can make up a new mood or term if one does not yet exist.

Unit Two: "Racist Algorithms and Hidden Big Data." Pages 76 - 150, "Eden" Feed

On multiple occasions the narrative of *Feed* is guided by unseen protocols that function through the major technological companies of the future. For this unit, students will engage in a video analysis of an episode of the television show Black Mirror, "Nose Dive." During this unit students will learn about the hidden ways in which data can guide and influence our unconscious identity structures. This unit hopes to critically examine the evolution of how we imagine fair, democratic technologies and what *utopia* might be.

Unit Three: "Dead Technologies: Media Cultures Through the Past." Pages 150 - 225, Feed

A major theme throughout the novel *Feed* is that of technological advancement. Numerous past technologies are showcased alongside newly invented ones that shape the future, dystopian world. This in-class activity will have students research and brainstorm the often neglected,

forgotten, and the non-obvious mediums, practices, and inventions we encounter everyday. Students will then choose a technology from the past that is no longer in daily use and reconsider how it might be useful in the future. Why has this invention simply gone away? Why do some technologies make a return? What can we learn by revisiting these old inventions?

Unit Four: "Speculative Technologies." Pages 225 - end of book Feed

Following our in-class dead technology exercise, students will draft a guide governing the design, use, and/or implementation of a new technology. You must create or fundamentally change a past technology to serve some sort of ethical purpose. The guide should be constructed for an appropriate user in the future and should be 2-3 pages long. You should include some statement explaining what ethical grounds the guide was written on, in addition to your recommendations for development and use. This guide can be shaped in any way you like (manifesto, ethical principles, guidelines, list of instructions/rules) as long as it makes sense for your technology and intended audience. Be creative and have fun!

Once you have selected a technology you will write about what has helped to produce it. Is it based on economic factors? Mental and/or physical health worries? Past technological impacts? Historical events / traumas? Popular culture fads and phenomena? New opportunities for self-growth? Evolving attitudes toward race, gender, sexuality etc?

**Unit Five:** In-class Presentations

Each student will present their guide examining a new technology they created. Each of the presentations is a short version of the 2-3 page essay. It must be between 3-5 minutes (I will be timing these presentations) So, practice is essential so that you know you can hit the 3-5 minute zone. Two people in class will be asked to briefly respond to your presentation. Total time for paper and discussion will be 7-8 minutes each. I hope that we find ways to make these presentations lively and engaging!

## Online & High school teaching experience

I began teaching at Villanova University in January 2020, just before the COVID-19 pandemic sent our in-class courses online. Since then, I have been continuing to pick up classes that require online instruction, as well as hybrid modalities. These courses, all of which focus on teaching technical writing and communication to engineering students, have expanded my skills to prepare those needing to learn over Zoom to participate in new engaging ways. Utilizing key resources such as Mediasite for supplying students with resources, as well as setting up a whiteboard in my office for more engaging lectures, has helped me adapt to find the most efficient ways to keep students actively participating. Additionally, Before starting at Villanova University I was a course designer and instructor for middle school aged students. With the company BSD Education, I taught after school courses on computer coding and design. Here, I learned to handle not only the students educational needs, but also their emotional needs as after school programs often drew students looking for a productive place to go after classes had ended.