

Class	Date	Topic	Reading	Presentation/ Discussion Leader
1	3/15/21	Welcome/Introductions and personal stories Preview of Course Climate Change - Effects of Deforestation and Atmospheric Chemistry	10 am: 11 am: pages 124 - 137 https:// feedbackloops climate.com/ introduction/	1) Kathleen & Mickey 2) Kathleen
2	3/22/21	The Oceans: Guest: A Frozen Ocean in a Warming Climate	10 am: pages 96-104 & Links from Vicki sent via additional email 11 am: https:// feedbackloops climate.com/ albedo/	1) Vicki Ray Don Perovich PhD_ Professor of Engineering Dartmouth College

Class	Date	Topic	Reading	Presentation/ Discussion Leader
3	3/29/21	<p>Physics: Energy/ Technology: Battery and Fuel Cells- Part of the Solution</p> <p>Guest: Fusion Reactors concepts, history, promise, perils</p> <p>Virtual Field Trip MYSTERY:</p> <p>DIII-D Reactor in San Diego or</p> <p>ITER in Southern France with Francesca as our guide.</p> <p>BYOB California or French Wine after party</p>	<p>10 am: pages 284-289/346 - 354</p> <p>How Green Are Electric Vehicles? https:// www.nytimes.c om/ 2021/03/02/ climate/ electric- vehicles- environment.ht ml? referringSourc e=articleShare</p> <p>11 am Star In Bottle NYer Article https:// www.newyorke r.com/ magazine/ 2014/03/03/a- star-in-a-bottle</p> <p>Explanation of Fusion https:// www.youtube.c om/watch? v=mZsaaturR6 E</p>	<p>1) Robert Willis</p> <p>2) Francesca Turco PhD</p> <p>Columbia University</p> <p>ITER France</p> <p>DIII-D reactor San Diego</p>

Class	Date	Topic	Reading	Presentation/ Discussion Leader
5	4/12/21	<p>What is the Internet, and how did we get it ? What is Net Neutrality ?</p> <p>Discussion: How did the advent of the internet effect your life: professionally or personally ?</p> <p>Guest: Enabling The Information Age with Chemistry - How We Make Computer Chips</p>	<p>10 am pages 378-389 https://www.thestreet.com/technology/what-is-net-neutrality-14816850</p> <p>11am: page 292, https://www.semiconductors.org/semiconductors-101/what-is-a-semiconductor/. And https://youtu.be/_VMYPLXnd7E</p>	<p>1) Laura Tucker</p> <p>2) Peter Trefonas, PhD DuPont Fellow</p>

Class	Date	Topic	Reading	Presentation/ Discussion Leader
6	4/19/21	<p>Gene Editing/CRISPR/ Ethical dilemmas</p> <p>*Fiction: Audio & Text https:// www.newyorker.com/ magazine/2016/11/07/ are-we-not-men</p> <p>What ethical limits, if any, should there be to the use of CRSPR technology? To eliminate diseases such as sickle cell? To enhance "normal" abilities e.g. sports? To create embryos without certain inheritable conditions?</p> <p>The Human Genome Project: On the Future of Bioinformatics/ Computational Biology”</p> <p>Many of the links Sorin sent were quite technical; I selected a video on computational chemistry and one of his essays I will email seperately. Also a full link to his bio with further links</p>	<p>10 am:pages 249-257</p> <p>https:// www.youtube.co m/watch? v=TdBAHexVYzc &t=124s</p> <p>https:// news.harvard. edu/gazette/ story/2019/01/ perspectives- on-gene- editing/</p> <p>11am: guest https:// www.youtube.c om/watch? v=0D5StDpMx as</p> <p>https:// www.brown.ed u/Research/ Istrail_Lab/ sorin.php</p>	<p>1)Roz Ladd</p> <p>*Fiction added by Coordinators:</p> <p>Plays right into Roz’s discussion ?’s & It’s a ROMP</p> <p>Sorin Istrail PhD- Brown</p>

Class	Date	Topic	Reading	Presentation/ Discussion Leader
7	4/26/21	Viruses and The immune system & Vaccines Guest: Covid and other emerging infectious diseases	10am: pages 174-5/246-7 (https://www.nytimes.com/2021/02/26/opinion/sunday/coronavirus-alive-dead.html) 11am: guest suggested links	1) Merle & Mickey Immune video: https://www.youtube.com/watch?v=fSEFXI2XQpc 2) Shannon Bennett PhD Virologist Cal Academy of Science
8	5/3/21	Transport Technology BioTechnology	10 am: pages 354-368 11 am: pages 302 - 304	1) Mike Webster 2) Richard Mcwhirter
9	5/10/21	Digital Devices The Evolution of Precision	10am: pages 384-398 11 AM see separate attachment	1) Becky Randolph 2) Lee Ashcraft

Class	Date	Topic	Reading	Presentation/ Discussion Leader
10	5/17/21	Geo engineering: Controversial radical steps to save our Planet we need to understand, but hope not to use	10 AM pages 124-127 & see separate attachment	1) Celene Healy & Sue Remington
		Breaking the Mold 1) the Legacy of Henrietta Lacks	11 AM 1) https:// www.hopkinsm edicine.org/ henrietalacks/	Dagmar Frinta
		2) the young Scientist you never heard about that was key to Covid vaccines		Margo Davis
		Closing thoughts and discussion	11:45 AM	Kathleen & Mickey

