Week 1: Introduction and overview of Microbiology

Week 2: Cell biology and microbe classification
Symbiotic: how they live with us. Bacteria vs. Virus.

Week 3: Immune System: How it keeps us safe: A simple explanation of how it works to fight off infection and disease
Vaccines and Vaccinations: discovery and use today, controversy and myths

Week 4: John Snow and the Cholera epidemic
The flu epidemic of 1918
Sanitation: Why it matters. Sewage then and now; trash and vector; Water; Food Safety

Week 5: Disease investigation, vectors (how diseases are transmitted)

Week 6: Antibiotics: Friend or Foe
Antibiotics: wonder drugs or time bombs (use, overuse and current implications)
Drug resistant bacteria (C-Dif etc. and what we are doing or not doing about it)
Antivirals: AIDS etc.

Week 7: Gut Microbiome: What we know, what we are learning and how it might change our lives.
The Gut Microbiome: Current thought and research, The American Gut Project
Africa and original gut microbes, microbes of the developed world; Allergies, theory on the current increase; Autoimmune diseases: asthma, Crohn’s, IBS, MS; Fecal transplants: The yuk factor; Diet for the gut; Exercise: why it’s important; Dogs, cats, other pets, dirt, antibacterial soaps and cleaners

Week 8: Germ Warfare
Wrap-up: what does the future look like