

HUMS 4103 – Tentative Schedule – Winter 2018

Date	Time	Subject	Notes
LECTURE 1 - INTRODUCTION AND THE NATURE OF SCIENCE			
Wednesday 10Jan2018	Lecture 1 6:00-9:00	Welcome to the course. Course format, assessment, readings, CuLearn. Some perspectives on science and technology.	Read the syllabus.
LECTURE 2 – PHILOSOPHY OF SCIENCE			
Wednesday 17Jan2018	Lecture 2 6:00-9:00	Some of the key philosophers of science. Demarcation and falsifiability.	
LECTURE 3 –SCIENCE AND TECHNOLOGY			
Wednesday 24Jan2018	Lecture 3 6:00-9:00	Some ways to think about science and technology.	
LECTURE 4 – PHYSICS			
Wednesday 31Jan2018	Lecture 4 6:00-9:00	Everything happens for a reason, and that reason is usually physics.	Quiz 1: Lectures 1,2,3
LECTURE 5 – NATURAL HISTORY			
Wednesday 07Feb2018	Lecture 5 6:00-9:00	Nature cannot be fooled. Guest lecture from Mike Runtz.	Assignment 1 is due: Friday 09Feb2018
LECTURE 6 – CHEMISTRY AND NANOTECHNOLOGY			
Wednesday 14Feb2018	Lecture 6 6:00-9:00	Chemistry: it's all about the electrons.	Peer reviews are due: Friday 16Feb2018
READING WEEK			
Wednesday 21Feb2018		Winter Break. No classes.	
LECTURE 7 – ASTRONOMY AND COSMOLOGY			
Wednesday 28Feb2018	Lecture 7 6:00-9:00	From ancient Babylon through Galileo, Hubble, and beyond.	
LECTURE 8 - MATHEMATICS			
Wednesday 07Mar2018	Lecture 8 6:00-9:00	We live in a world described by mathematics.	Quiz 2: Lectures 4,5,6,7 Assignment 2 is due: Friday 09Mar2016
LECTURE 9 – EVOLUTION			
Wednesday 14Mar2018	Lecture 9 6:00-9:00	Where do we come from? Evolution of cooperation.	Peer reviews are due: Fri 16Mar2016
LECTURE 10 – EARTH SCIENCE AND THE FOSSIL RECORD			
Wednesday 21Mar2018	Lecture 10 6:00-9:00	What is the world made of?	
LECTURE 11 - MOLECULAR BIOLOGY: MENDEL TO THE HUMAN GENOME			
Wednesday 28Mar2018	Lecture 11 6:00-9:00	Human Genome Project, personalized medicine, bioethics, and transhumanism.	
LECTURE 12 – BIOTECHNOLOGY AND NEUROSCIENCE			
Wednesday 04Apr2018	Lecture 12 6:00-9:00	Genetic engineering, GMOs, synthetic biology, neuroscience, fMRI, neuro-optics, and neuro-ethics. Course summary.	Quiz 3: Lectures 8,9,10,11 Grant Proposal Due on last day of exam period.