

JEE 685 Climate Change: Physical Science Basis, Semester 1/2021

Dates and Times: Monday 0900-1200 hrs., Starting date: 8 Aug 2022 (on site & online)

Lecturer: Amnat Chidthaisong

Date	Lecture#	Topic
Aug 8	1	Introduction & Overview: class procedures, expectation, and basic needs, climate change and sustainability
Reading		Johan Rockström et al., 2009. Planetary Boundaries: Exploring the Safe Operating Space for Humanity
Aug 15	2	Climate archives, data and models
Reading		Earth's Climate: Past and Future. W.H. Freeman and Company, New York. 2008. Chapters 1-2
Aug 22	3	Plate tectonic and climate
Reading		Earth's Climate: Past and Future. W.H. Freeman and Company, New York. 2008. Chapters 3-4
Aug 29	4	Orbital-scale climate change
Reading		Earth's Climate: Past and Future. W.H. Freeman and Company, New York. 2008. Chapters 7-11
Sep 5	5	Greenhouse gases and climate I
Sep 12	7	Greenhouse gases and climate II
Sep 19	8	Greenhouse gas and climate III
Sep 26	9	Future climate change
Oct 3	Midterm exam	
Oct 10	10	Discussion, student presentation on current topics of climate change
Oct 17	11	Discussion, student presentation on current topics of climate change
Oct 24	12	Discussion, student presentation on current topics of climate change
Oct 31	13	Discussion, student presentation on current topics of climate change
Nov 7	14	Discussion, student presentation on current topics of climate change
Nov 14	15	Discussion, student presentation on current topics of climate change
Nov 21	16	Discussion, student presentation on current topics of climate change
Nov 28		Final exam