

BILD 42 Sp23 Course Schedule:

Lecture	Topic	Book Chapter	Date
	<i>Energy by the Numbers (Murphy)</i>		April 4
23-1	Introduction to Energy – Food - Water	1	April 6
23-2	History of fossil fuel and future prospects of fossil energy	2	April 11
23-3	Climate Change	3	April 13
23-4	Renewable Energy Sources	4	April 18
	<i>Electric vehicles, Smart grid and energy storage (Torres)</i> <i>Wind Power and Turbine Technologies (Bazilevs)</i> <i>Photovoltaic and Photothermal Energy Production (Coimbra)</i>		
23-5	Electric Cars and Battery Technology	5	April 20
23-6	Industrial Agriculture	6	April 25
	<i>Energy and Modern Agriculture (Briggs) - 1</i> <i>Energy and Modern Agriculture (Briggs) - 2</i> <i>Climate Change and Food Security (Burney) - 1</i> <i>Climate Change and Food Security (Burney) - 2</i>		
	1st Mid-term Exam		April 27
23-7	Future Food		May 2
	<i>Corn ethanol (Smith)</i>		
23-8	Renewable Fuels – First Generation Ethanol	7	May 4
23-9	First Generation Biofuels – Biodiesel	7	May 9
	<i>Alternative Sources of Biomass Jatropa (Schmidt)</i> <i>Cellulosic ethanol commercialization (Rubino)</i>		
23-10	Second Generation Biofuels – Cellulosic Ethanol	9	May 11
23-11	Aquatic Biomass – Cyanobacteria, Diatoms & Algae	9	May 16
	<i>Production Process for Biofuels from Algae (McBride)</i>		
23-12	Synthetic Biology for Enhanced BioProducts production	10	May 18
	2nd Mid-term Exam		May 23
	<i>Biogas (Hein)</i>	11	
23-13	Renewable and Biodegradable Polymers from Algae	12	June 1
23-14	Economic of Energy	13	June 6
	<i>Economics of Energy (Graff Zivin)</i>		
23-15	Final Thoughts On - Our Sustainable Future		June 8
	<i>Importance of Energy for the Bottom Billion (McCord) - 1</i> <i>Importance of Energy for the Bottom Billion (McCord) - 2</i> <i>Energy Services for the Remote Communities of Nepal (Zahnd)</i> <i>The International Politics of Climate Change Outline (Victor) - 1</i> <i>The International Politics of Climate Change Outline (Victor) - 2</i>		
	Final Exam 3:00 – 6:00 pm Monday		June 12