2020 SYLLABUS

THE SCIENCE OF ENERGY

Instructor: John M. Hurley
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Paradise Room 512: 9:00AM-10:45 AM

Dates 2-06 to 4-16

Feb 06 Part 1 - Energy and Human Civilization
   Part 2 - Energy: Forms and Conversion
Feb 13 Part 3 - Heat: The Transfer and Flow
   Part 4 - Electricity: Ultimate Energy
Feb 20 Part 5 - Chemical: Biomass, and Photosyn
   Part 6 - Coal: Convenient, Energy Fuel
Feb 27 Part 7 - Petroleum: Chemistry, Retrieval,
   Part 8 - New Petroleum Directions
Mar 05 Part 9 - Fossil Fuel Energy: Concerns
   Part 10 - Understanding Carbon Dioxide
Mar 12 Part 11 - The Science of Nuclear Power
   Part 12 - The Nuclear Fission Fuel Cycle
Mar 19 No Session – Spring Break
Mar 26 Part 13 - Sunlight: Inexhaustible Energy
   Part 14 - Solar Power Electricity
Apr 02 Part 15 - Wind Power Electricity
Part 16 – Hydro Power Electricity
Apr 09 Part 17 - Biofuels: Biodiesel and Ethanol
Part 18 - Geothermal Energy
Apr 16 Part 19 - Energy Storage Technologies
Part 20 - Energy Needs for Transportation
End of Lectures for this Series
Extra HO Session 21 - Energy Efficiency: Tech & Trends
Extra HO Session 22 - Energy Sources: Economics & Politics
Extra HO Session 23 - Possible Future Energy Sources
Extra HO Session 24 - Energy Trends: Near Future Planning