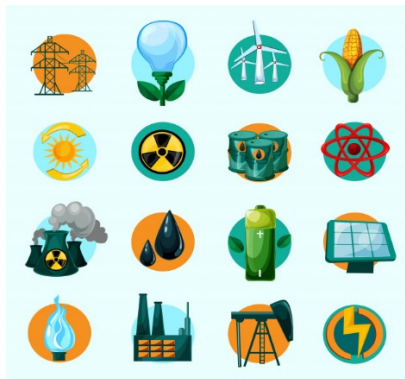


2020 SYLLABUS
THE SCIENCE OF ENERGY



Instructor: John M. Hurley

hurleyjm@yahoo.com

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**