Franklin & Marshall College - Physics and Astronomy Department
Foundations 111V: Energy Issues in Science and Society
F. Crawford
Spring 2013 Course Schedule

Dates	Topics	Reading
Wed Jan 16	Overview; The Earth as an Energy System	Ch. 1
Mon Jan 21	Energy Use and Consumption in Industrialized Societies	Ch. 1,2
Wed Jan 23	Energy Use and Consumption in Industrialized Societies	Ch. 2
Mon Jan 28	Quantitative Basics of Energy and Related Concepts	Ch. 3
Wed Jan 30	Quantitative Basics of Energy and Related Concepts	Ch. 3
Mon Feb 4	Quantitative Basics of Energy and Related Concepts	Ch. 3
Wed Feb 6	Quantitative Basics of Energy and Related Concepts	Ch. 4
Mon Feb 11	Quantitative Basics of Energy and Related Concepts	Ch. 4
Wed Feb 13	Quantitative Basics of Energy and Related Concepts	Ch. 4
Mon Feb 18	Fossil Fuels	Ch. 5
Wed Feb 20	Fossil Fuels	Ch. 5
Mon Feb 25	Environmental Impacts of Fossil Fuels	Ch. 6
Wed Feb 27	Environmental Impacts of Fossil Fuels; Nuclear Energy	Ch. 6,7
Mon Mar 4	Alternative Energies: Nuclear	Ch. 7
Wed Mar 6	Alternative Energies: Nuclear	Ch. 7
Mon Mar 11	*Spring Break - no class*	*none*
Wed Mar 13	*Spring Break - no class*	*none*
Mon Mar 18	Alternative Energies: Nuclear	Ch. 7
Wed Mar 20	Alternative Energies: Geothermal and Tidal	Ch. 8
Mon Mar 25	Alternative Energies: Solar	Ch. 9
Wed Mar 27	**Midterm Exam**	**none**
Mon Apr 1	Alternative Energies: Hydropower, Wind, Biofuels	Ch. 9,10
Wed Apr 3	Alternative Energies: Hydrogen	Ch. 11
Mon Apr 8	Climate Change and the Connection to Earth as a System	Ch. 12
Wed Apr 10	Climate Change and the Connection to Earth as a System	Ch. 13
Mon Apr 15	Climate Change: Trends and Models	Ch. 13,14
Wed Apr 17	Climate Change: Trends and Models	Ch. 14
Mon Apr 22	Climate Change: Projections and Possible Impacts	Ch. 15
Wed Apr 24	Climate Change: Projections and Possible Impacts; Wrap Up	Ch. 15

The listed readings are from *Energy, Environment, and Climate (2nd edition)* by Richard Wolfson. Supplemental readings are posted as links from the course web site.

We will have an in-class midterm exam on **Wed Mar 27**. There is no final exam.