## ENERGY FUTURE

Course Syllabus Spring 2010 PHYS428A 1-2CR (NW, IS) Website: courses.washington.edu/efuture/academic Physics-Astronomy Auditorium PAA102



The 1-2 credit seminar course is open to all matriculated and non-matriculated students at the UW. We will have weekly presentations by UW and outside speakers on contemporary topics in energy research. All members of the UW community and general public are welcome to attend.

The class will begin promptly on Thursday April 1, 2010, at 12:30pm in Physics-Astronomy Auditorium PAA102. We expect to webcast many of the lectures, also --details to follow.

Grading will be based on short, online quizzes/assessments/research related to each lecture, and also a final term paper. Substantial (i.e., greater than 80%) attendance of all academic lectures and the 5-6 evening lectures of the 'Energy Future' series is fully expected of all students enrolled for credit. This will be particularly enforced for students enrolling for 2 credits. Students enrolling for 2 credits will be responsible for a term paper that is somewhat richer in length, content, and perspective, and will be assisted by significant consultation with the course instructor.

For more information, contact the instructor, Prof. Jerry Seidler (efuture.uw.edu).

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Schedule of Presentations (All in PAA102 at 12:30pm)

**April 1**: Course overview and: What are the million, billion, and trillion dollar questions in both basic and applied energy research? *Gerald Seidler* (*UW Physics*)

**April 8**: Imaging Oil Biogenesis in Live Algal Cells with Nanoscale Resolution *Mark Cooper (UW Biology)* 

April 15: China and the Future of World Energy Steve Harrell (UW Anthropology)

**April 22**: A tale of two countries: The Global Influence of US and Chinese Energy Consumption *Dan Yaffe (UW-Bothell Interdisciplinary Arts and Sciences)* 

**April 29**: Nanoscience and Energy Storage *Guozhong Cao (UW Materials Sciences and Engineering)* 

May 6: To be announced

May 13: New Approaches to Energy Efficient Lighting and Displays Alex Jen (UW Materials Science and Engineering, Director of the UW Institute for Advanced Materials and Technology)

May 20: To be announced

May 27: The Science and Commercialization of Modular Nuclear Reactors Paul Lorenzini (CEO, NuScale Power)

June 3: To be announced

Questions? Contact: efuture@uw.edu