

# A FINANCIAL APPROACH TO CLIMATE CHANGE

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## **COURSE OBJECTIVES**

The course will introduce the science and economics of climate change and examine the implications for financial markets. An examination of the climate data and scientific explanations will be followed by a consideration of some climate skeptic viewpoints. The predicted economic damages of climate change will be discussed including costs of adaptation and mitigation. The impact of these costs on investors and the financial sector will be examined as a long run risk. Next, we will cover public policy in the presence of externalities. This will focus on pricing or regulating carbon and other greenhouse gases. Examination of energy generation in a carbon sensitive world will be covered by class presentations. Finally, the IPCC report on 1.5 degree warming that was presented this fall will give an assessment of where we stand.

## **GRADING**

There will be three homework assignments and a class presentation which will count as a fourth. There will be 5 quick quizzes at the start of each class. There is a final exam that will be on the second half of the last class.

Homework	40%
Quick Quizzes	10%
Final Exam	50%

## **READING**

There will be a lot of reading. The textbook is *The Climate Casino* by William Nordhaus who has just won the Nobel prize in Economics. There will be at least one reading assigned for each class and the homework will be based on the reading. These readings will be included on the course website. In addition there is a wealth of material on the web and you should feel free to access it.

Nordhaus, William D. (2013). [The Climate Casino: Risk, Uncertainty, and Economics for a Warming World](#). New Haven, CT: Yale University Press.

## **PREPARATION**

Please read before class begins: *CLIMATE CHANGE: EVIDENCE AND CAUSES*, an Overview by the Royal Society and the National Academy of Sciences.

**Schedule: TBA**

**Room: TBA**

Class 1: *The Science of Climate Change*

Class 2: *The Economic Costs of Climate Change*

Class 3: *A Financial Approach to Climate Risk*

Class 4 *Public Policy for Climate Change*

Class 5 *Energy Economics*

Class 6 *IPCC Special Report on Global Warming of 1.5°C and **Final Exam***