



For many of us, science provides the model for how to explore and understand the natural world. But what are the central features and advantages of a scientific worldview? Why do even reasonable scientists sometimes disagree with each other? How are scientific methods different than those of other disciplines? Can science provide an objective account of reality? *Philosophy of Science* introduces the most important philosophical issues that arise within the empirical sciences.

Requiring no previous background in philosophy, the course covers topics ranging from traditional questions about the nature of explanation and the confirmation of theories to practical issues concerning the design of physical experiments and modeling. In addition, we will also examine the function of thought experiments, discuss the realism/anti-realism debate, explore probability and theory testing, and address more challenging topics such as emergentism, measurement theory, and the manipulationist account of causation.

Instructor: Franz-Peter Griesmaier  
Location: Engineering 2109 (in person)  
Time: MWF 10:00 – 10:50  
Fall Semester 2022  
(08/22 – 12/09)