



College of Liberal Arts  
and Social Sciences

香港城市大學  
City University of Hong Kong



CAMS  
CLASS Advanced Methods School

Methodological Workshop

# INTRODUCTION TO SURVIVAL MODELS FOR THE SOCIAL SCIENCES

*Speaker*

**Professor Jeff Gill**



*Distinguished Professor  
Department of Government  
Department of Mathematics & Statistics  
American University*



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**03:00 PM -  
04:30 PM  
(HKT)**



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> Registration: <https://bit.ly/cams20240614b>



# INTRODUCTION TO SURVIVAL MODELS FOR THE SOCIAL SCIENCES

## Abstract

This workshop will cover the basics of survival models for the social sciences. These model time to and event on a case-level basis. Examples include time to the end of an international conflict, time to a change in government, time to response by political actors, and more. Technical considerations include hazard rates, types of censoring and truncation, as well as parametric and non-parametric approaches. Modes of inference for regression models will be provided. All applied work will be in the R software environment for statistical computing and graphics.

## Speaker Bio

Jeff Gill (PhD in Statistics and Government, American University) is Distinguished Professor in the Department of Government and also in the Department of Mathematics & Statistics, and the Founding Director of the Center for Data Science. He co-directs the Masters in Data Science at AU. Gill previously taught at Washington University and Harvard University. He has done extensive work in the development of Bayesian hierarchical models, nonparametric Bayesian models, elicited prior development from expert interviews, as well in fundamental issues in statistical inference. He has extensive expertise in statistical computing, Markov chain Monte Carlo (MCMC) tools in particular. Current theoretical develops new hybrid algorithms for statistical estimation with multilevel specifications and complex time-series and spatial relationships, as well clustering detection within algorithms and machine learning. Current applied work includes: blood and circulation physiology including how our bodies change these dynamics in times of stress such as injury, long-term mental health outcomes from children's exposure to war, pediatric head trauma, analysis of events data, survey research methodologies, and spatial analysis of social and biomedical conditions.