

<b>Titel:</b> Methods in International Relations I: Applied Linear Regression Analysis	
<b>Art der Veranstaltung:</b> Übung	<b>Angeboten im:</b> Frühjahrssemester 2014

### **Kursbeschreibung:**

This course is about the linear regression model and its application in political science. The course is centered around Fox's textbook (see below) and covers mainly part II and III (Chapter 5 to 13). We will focus on the following topics: How do we estimate the parameters in a linear regression model and how to make inferences about them (in small and large samples)? What is their interpretation? Under what conditions can the linear regression model be used to analyze data? How can we detect if important assumptions are violated (non-constant error variance, non-linearity, influential data, omitted variables, measurement error); what to do in such cases? The course's overall goal is to give students a good understanding of linear regression (which includes its mathematical foundations) in order to enable them to apply it thoughtfully to analyze data. The acquired knowledge will also serve students well when using other regression models, such as discrete choice models. Each session will be a mix of lecture, demonstrations, and hands-on problem solving by students.