

**Seminar “Introduction to Statistical Methods for Political Scientists”
Summer Term 2005**

(This course is offered for the University of Potsdam programs as well as the *joint MA* in International Relations of the Humboldt University Berlin, the Free University Berlin, and the University of Potsdam.)

Goals

This course provides an introduction to statistical methods for post-graduate students, esp. contemporary regression models. It will teach students the tools needed for an applied course on “quantitative international relations” during the winter term 2005-2006 (which will use the statistical methods acquired in this course and applies it to 3-4 topical domains of international relations). To attend the latter course, students must have taken the present introductory course or prove equivalent training.

Logistics

- Times: (i) Thursdays, 14 April – 16 June 2005, 14:00 – 18:00 h;
no sessions on 05 May 2005;
(ii) additional sessions on Tuesday 19 & 26 April 2005, 12:00 – 13:30 h (location: see “cluster periods for homework”)
- Locations: Thursdays, 14:00 – 16:00 h: Room 3.01.119;
Thursdays 16:00 – 18:00 h: Room 3.01.248
- Additional Computer Cluster Periods for *Homework*:
Tuesdays, 12:00 – 14:00 h and Wednesdays, 10:00 – 12:00 h (each in room 3.01.248).
- Remarks: The number of students is limited to 25. Priority is given to students who need to take this course to fulfill their curricular requirements and are in their last year of studies.

Course Setup

This course combines

- intensive readings *in advance* of the weekly sessions (beginning with session 1 – please come prepared for your first session!),
- an introduction to the statistical software and a series of computer exercises, and
- four assignments.

As the material covered in the course is cumulative, students are strongly advised to attend all sessions. It is also recommended that students buy the Wooldridge textbook (see below) prior to attending the course. Check <http://bookbutler.com> for comparing prices and vendors.

Prerequisites & Registration

Students must have completed a B.A., Vordiplom, or equivalent. Students are assumed to have command of basic mathematical knowledge, such as found in Wooldridge (2003, Appendices A & B). You should review such material during the spring vacation *prior* to class. Registration for the course is exclusively via the Blackboard site of the University of Potsdam:

<http://black.rz.uni-potsdam.de>

(check under courses in “Sozialwissenschaften” and subsequently under “Detlef Sprinz”).

Office Hours

After the seminar and by appointment (see contact details below).

Contact Details

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Course Webpage

<http://www.uni-potsdam.de/u/sprinz/teaching.html> or
http://www.uni-potsdam.de/u/ls_interorg/teaching.htm.

Required Readings

Wooldridge, Jeffrey M. 2003. *Introductory Econometrics - A Modern Approach*. second edition. Mason, OH: South-Western.

Course Requirements

Grading: Students will have to complete 4 homework assignments as individuals. These exercises will be announced via Blackboard mailings. Each exercise weights 25% towards the final grade. For these assignments, we have reserved the computer clusters on two days (see page 1). Papers submitted by the due date and time will be given a bonus of one third of a grade point. Verification is by the timestamp embossed in the e-mail by the (receiving) University of Potsdam server.

Format: At minimum, leave one inch margins from all four edges of A-4 sheets. Footnotes are strongly discouraged. Papers should start with the first and last name of the author, student identification number, name of university, and the number of the exercise.

Submission: Papers are due no later than indicated on the assignment. Send the assignment as attachment, formatted in Rich Text Format (RTF) to sthohl@rz.uni-potsdam.de. Students are responsible for checking their

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submissions for virus problems and for spell-checking the document prior to submission.

In enforcing this submission policy, the instructors accept delays caused by the University of Potsdam internet facilities. All University of Potsdam students are entitled to free [Internet Technology facilities](#) as well as relevant training in how to use them. Students from outside the University of Potsdam are encouraged to check with their home institution. Problems caused by outside internet technology providers are at the risk of the student (e.g., server is down, problems with file attachments, etc.).

Course Overview

Week	Date	Topic	Required Readings	Assignments
1	14 April 2005	Course Overview; Review of Mathematical Tools and Probability Theory; Introduction to STATA	Wooldridge (2003): ch. 1 + Appendices A & B	
2A	19 April 2005	Data Management and Descriptive Statistics with STATA		
2B	21 April 2005	Simple Regression Model	Wooldridge (2003): ch. 2 + Appendix C	
3A	26 April 2005	Regression & Graphics with STATA		
3B	28 April 2005	Multiple Regression: Estimation & Inference	Wooldridge (2003): chs. 3+4	
4	05 May 2005	<i>Public Holiday</i>		First assignment due 04 May 2005, 16:00 h
5	12 May 2005	Multiple Regression: Additional Topics	Wooldridge (2003): chs. 5-7	
6	19 May 2005	To be determined		Second assignment due 19 May 2005, 16:00 h
7	26 May 2005	Heteroskedasticity & Data Problems	Wooldridge (2003): chs. 8+9	Third assignment due 30 May 2005, 16:00 h
8	02 June 2005	Overview of Time Series	Wooldridge (2003): chs. 10-12	
9	09 June 2005	Panel Data	Wooldridge (2003): chs. 13+14	Fourth assignment due 13 June 2005, 16:00 h
10	16 June 2005	Limited Dependent Variables; Carrying Out Empirical Research	Wooldridge (2003): chs. 17+19	