



<b>COURSE: Statistics for social sciences II: multivariate techniques</b>		
<b>DEGREE: International Studies (IS) / IS and Law / IS and Political Science</b>	<b>YEAR: 2 (3 for IS and Law)</b>	<b>TERM: 1</b>

WEEKLY PLANNING								
WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		Special room for session (computer classroom, audio-visual classroom...)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	Topic 1.1. Simple linear regression. Introduction; motivation; graphical data analysis; model formulation; parameter interpretation; examples; applications.	X			Study of Topic 1.1	1,5	6
1	2	Practical class.		X		Exercises for Topic 1.1	1,5	
2	3	Topic 1.2. Fitting the model to the data; the least squares criterion; using the fitted model.	X			Study of Topic 1.2	1,5	6
2	4	Practical class.		X		Exercises for Topic 1.2	1,5	
3	5	Topic 1.3. Model assumptions; inference on model parameters I: confidence intervals; inference on the response.	X			Study of Topic 1.3	1,5	6

3	6	Practical class.		x		Exercises for Topic 1.3	1,5	
4	7	Topic 1.4. Inference on model parameters II: hypothesis testing; statistical significance of estimated parameters.	x			Study of Topic 1.4	1,5	6
4	8	Practical class.		x		Exercises for Topic 1.4	1,5	
5	9	Topic 1.5. Assessing model fit; ANOVA; model diagnostics.	x			Study of Topic 1.5	1,5	6
5	10	Practical class.		x	computer classroom	Computer lab	1,5	
6	11	Topic 2.1. Multiple linear regression. Motivation; model formulation; parameter interpretation; examples; applications; fitting the model to the data; the least squares criterion; using the fitted model.	x			Study of Topic 2.1	1,5	6
6	12	Practical class.		x		<b>1st midterm exam</b>	1,5	
7	13	Topic 2.2. Model assumptions; inference on model parameters I: confidence intervals; inference on the response.	x			Study of Topic 2.2	1,5	6
7	14	Practical class.		x		Exercises for Topic 2.2	1,5	
8	15	Topic 2.3. Inference on model parameters II: hypothesis testing; statistical significance of estimated parameters; assessing model fit; ANOVA.	x			Study of Topic 2.3	1,5	6
8	16	Practical class.		x		Exercises for Topic 2.3	1,5	
9	17	Topic 2.4. Selection of predictor variables; multicollinearity; model diagnostics.	x			Study of Topic 2.4	1,5	6
9	18	Practical class.		x	computer classroom	Computer lab	1,5	
10	19	Topic 3.1. Binomial logistic regression. Motivation; model assumptions and formulation; parameter interpretation; examples; applications.	x			Study of Topic 3.1	1,5	6
10	20	Practical class.		x		Exercises for Topic 3.1	1,5	
11	21	Topic 3.2. Fitting the model to the data; using the fitted model; inference on model parameters; statistical significance of estimated parameters.	x			Study of Topic 3.2	1,5	6

11	22	Practical class.		x		Exercises for Topic 3.2	1,5	
12	23	Topic 3.3. Assessing model fit; selection of predictor variables; multicollinearity.	x			Study of Topic 3.3		6
12	24	Practical class.		x	computer classroom	Computer lab	1,5	
13	25	Topic 4.1. Principal component analysis. Motivation; formulation; variance explained; examples; applications.	x			Study of Topic 4.1	1,5	6
13	26	Practical class.		x		<b>2nd midterm exam</b>		
14	27	Topic 4.2. Deciding the number of components to keep; component scores; interpretation of components; graphical representations.	x			Study of Topic 4.2	1,5	6
14	28	Practical class.		x	computer classroom	Computer lab	1,5	
<b>Subtotal 1</b>							<b>42</b>	<b>84</b>
<b>Total 1 (Hours of class plus student homework hours between weeks 1-14)</b>							<b>126</b>	

15		Tutorials, handing in, etc				Tutorials	6	
16		Assessment					3	15
17								
18								
<b>Subtotal 2</b>							<b>3</b>	<b>21</b>
<b>Total 2 (Hours of class plus student homework hours between weeks 15-18)</b>							<b>24</b>	

<b>TOTAL (Total 1 + Total 2)</b>							<b>150</b>	
----------------------------------	--	--	--	--	--	--	------------	--