

## SYLLABUS for Statistical-Economic Analysis

Basic data for the course	
Academic unit:	Faculty of Economics
Title of the course:	<b>Statistical-Economic Analysis</b>
Level:	Bachelor
Status of the course:	Obligatory
Year of studies:	Second year – fourth semester
Number of hours per week:	2 + 1
ECTS credits:	6
Time/location:	Faculty of Economics, University of Prishtina "Hasan Prishtina"
Tutor:	Prof. Ass. Ardiana Gashi
Tutor's contact details:	ardianag@gmail.com
Content of the course	
Content of the course	Students will learn how to use correlation and regression, analyze variance and covariance, and test statistical hypotheses using the normal, binomial, t, and F distributions. Topics on inferential statistics, covering crucial topics ranging from experimental design to the statistical power of F tests are included.
Course's objectives:	The aim of the course is to teach students how to perform core statistical tasks every business professional, student, and researcher should master by using EXCEL. Using real-world examples, from Carlberg's book, it will help students to choose the right technique for each problem and get the most out of Excel's statistical features, including recently introduced consistency functions. Along the way, the course clarifies confusing statistical terminology and helps students to avoid common mistakes.
The expected outcomes:	The course will teach students how to perform core statistical tasks every business professional, student, and researcher should master by using EXCEL. Using real-world examples, from Carlberg's book, it will help students to choose the right technique for each problem and get the most out of Excel's statistical features, including recently introduced consistency functions. avoid common mistakes.
The students' workload (hours per semester, ECTS)	

Activity	Week	Hours	Total
Lectures	2*15 weeks		30
Seminars (theoretical and practical)	1*15 weeks		15
Case studies	3		10
Direct contact with tutor	1		5
Field research	10		10
Colloquiums	2		6
Homework	1*14 weeks		15
Individual study (at library or at home)			50
Final preparation for the exam	2		2
Evaluation	2		2
Projects, presentation etc.	5		5
<b>Total</b>			<b>150</b>
<b>Teaching methods:</b>	The teaching and learning process will be organized through lectures and mostly exercises. Students will apply their knowledge by applying statistical knowledge through Excel and will be introduced to SPSS as well.		
<b>Assessment methods:</b>	Students will be evaluated during the whole academic year. Active participation 5%; practical homework with data = 5%; test 1 = 45%; test 2 = 45%.		
<b>Literature</b>			
<b>Basic literature:</b>	<p>1. Statistical Analysis: Microsoft Excel 2013 [Paperback] Conrad Carlberg; Publication Date: April 13, 2014, ISBN-10: 0789753111, ISBN-13: 978-0789753113   Edition: 1</p> <p>2. Statistical Analysis: Microsoft Excel 2010 [Paperback], by Conrad Carlberg, Publication Date: May 2, 2011, ISBN-10: 0789747200, ISBN-13: 978-0789747204, Edition: 1</p> <p>Statistics for Management and Economics (with Online Content Printed Access Card) [Hardcover], Gerald Keller, Publication Date: January 1, 2011; ISBN-10: 0538477490; ISBN-13: 978-0538477499; Edition: 9</p>		
<b>Additional literature:</b>	Statistical Analysis of Financial Data in R (Springer Texts in Statistics) [Hardcover], by René Carmona, Publication Date: January 8, 2014, ISBN-10: 1461487870, ISBN-13: 978-1461487876   Edition:		

<b>The detailed plan of work:</b>	
<b>Week</b>	<b>Topic</b>
<b>Wee 1</b>	Introduction and discussion of basic concepts in Statistics and application in Business decision making
<b>Wee 2</b>	Preparing data for data analyses: missing values, checking quality of data, testing logic between variables, identifying outliers. Use of real raw data before cleaning has taken place
<b>Wee 3</b>	Analyses of basic descriptive statistics. How to report and interpret descriptive statistics so readers are well informed
<b>Wee 4</b>	Estimating correlation between variables and conducting regression analyses. Discussion of data needed
<b>Wee 5</b>	Estimating correlation between variables and conducting regression analyses. Discussion of data needed
<b>Wee 6</b>	Hypothesis testing, application and its relevance for the business decision making.
<b>Wee 7</b>	Hypothesis testing, application and its relevance for the business decision making.
<b>Wee 8</b>	Normal distribution and its application. Examples from application of Normal Distribution by companies.
<b>Wee 9</b>	Binomial distribution and its application.
<b>Wee 10</b>	Student Distribution and its application.
<b>Wee 11</b>	F-test and application
<b>Wee 12</b>	F-test and application
<b>Wee 13</b>	Experimental design
<b>Wee 14</b>	Experimental design
<b>Wee 15</b>	Wrap up of topics covered and preparation for the final exam

**Academic policies and code of conduct:**

Any student who participates in cheating in ANY WAY including, but not limited to: (1) Using lecture/study notes or summaries in any form during examinations, (2) Copying examination answers, (3) Failing to cover answers on an examination, (4) Giving and/or receiving examination questions and/or answers, (5) Removing an examination from the classroom, and/or (6) Giving or receiving assistance on an assignment that goes beyond that allowed by your instructor, **WILL RECEIVE A FAILING GRADE IN THIS COURSE. ALL ASSIGNMENTS AND EXAMINATIONS FOR THIS CLASS ARE TO BE DONE INDEPENDENTLY UNLESS STATED OTHERWISE BY YOUR INSTRUCTOR.**