

Course title: Statistics

| Course Basic Information | | | |
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| Academic Unit: | Faculty of Economics, University of Pristina | | |
| Course title: | Statistics | | |
| Level: | BA | | |
| Course Status: | Mandatory | | |
| Year of Study: | 1st Year/Second Semester | | |
| Number of Classes per Week: | 2+2 | | |
| ECTS Credits: | 6 ECTS | | |
| Time /Location: | AM According to the timetable | | |
| Teacher: | Prof. Dr. Rahmije Mustafa Topxhiu | | |
| Content of the course | Module of Basics Statistics contains the following topics: main notions and concepts of statistics; sampling; questionnaire development; data description; calculation of location and distribution descriptive statistics; relative distribution statistics; indices; time series and forecasting; correlation indicators and linear regression analyses. | | |
| Course's objectives: | Main objective of the module is to equip students with knowledge, skills and competencies in undertaking the whole process of statistical study. | | |
| The expected outcomes: | <p>On successful completion of this module, students should be able to:</p> <ul style="list-style-type: none"> - Describe how statistics affects their daily life and recognize the role of statistics in different disciplines; - Select and construct appropriate graphical, tabular, and numerical summaries of the distributions of variables in a data set; - Calculate, interpret and apply measures of descriptive statistics for grouped and ungrouped data cases; - Calculate and interpret different indicators of dynamic analysis, such as indexes; linear, exponential trend parameters, and so on. - Analyze the relationship that exists between two variables based on simple modeling, analyze the correlations between the variables, and so on. - Analyze and debate statistical arguments, such as those found in the daily press and scientific publications. | | |
| Student Workload (should be in compliance with student's Learning Outcomes) | | | |
| Activity | Hours | Day/ Week | Total |
| Lectures | 2 | 15 | 30 |
| Theory/ Lab Work/Exercises | 2 | 15 | 30 |
| Practical Work | 2 | 5 | - |
| Consultations with the teacher | 1 | 1 | 6 |

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| Field Work | - | - | - |
| Tests, seminar paper | - | - | - |
| Homework | 2 | 10 | 20 |
| Self-study (library or home) | 2 | 10 | 20 |
| Preparation for final exam | - | - | 31 |
| Assessment time (test, quizzes, final exam) | 3 | 3 | 9 |
| Projects, presentations, etc. | - | - | 4 |
| Total | | | 150 |
| Teaching Methods: | | | |
| | <p>The teaching method during the three hours of lectures will focus on lectures and interactive discussions with student participation in the learning process, with individual and group presentations, of various works prepared by the students. Students are encouraged to research and read materials about the following topics beforehand in order to be more prepared in classroom hours to develop interactive discussions between them in order to acquire faster and deeper implications for important issues in statistics.</p> <p>The concepts taught during class hours will be practiced through concrete examples and additional problems during exercise hours. Students will be engaged in applying their gained knowledge by applying data sets mainly from Kosovo. Students will be provided classroom and home based tasks which will then be presented and discussed with their peers during exercise classes. Being actively engaged in discussions and in doing homework, students will improve communication and analytical skills. Students will as well gain skills in data entry, cleaning and analyses by applying Excel and SPSS.</p> | | |
| Assessment Methods: | | | |
| | <p>Students will be assessed throughout the whole academic year and also by a final exam by applying the following distribution of assessment:</p> <ul style="list-style-type: none"> - Active participation: 5%; - Practical seminar by using data: 10%; - Homework- 10% - Test 1: 10%; - Test 2: 10% - Final exam accounting for 55% of assessment. <p>Criteria for passing the exam are based on the decision note of the Faculty Council and described in the Self-assessment report.</p> | | |
| Literatura | | | |
| Primary Literature: | Rahmije Mustafa Topxhiu: <i>HYRJE NË STATISTIKË</i> , Prishtinë, 2016 | | |
| Additional Literature: | <ol style="list-style-type: none"> 1. Prem S. Man, <i>Introductory Statistics</i>, Seventh Edition, John Wiley & Sons, 2010, USA, 2. Douglas A. Lind. William G.Marchal, Samuel A. Wathen, (2013), <i>Basic Statistics for Business & Economics</i>, Eighth Editon, McGraw-Hill/Irwin, International Edition, New | | |

| | York. 3. David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, (2013), <i>Statistika për biznes dhe ekonomik</i> , UET press, Tiranë. | |
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| Designed teaching plan | | |
| Week | Title of the Lecture (Book: <i>HYRJE NË STATISTIKË- Introductory Statistics</i>) | Pages |
| Week 1: | Introduction to module, learning outcomes, teaching and learning, and assessment | |
| Week 2: | CHAPTER 1. THE IMPORTANCE OF STATISTICS 1.2 What do we mean by Statistics? 1.3 Types of Statistics 1.4 Key concepts in statistical analysis 1.6 Data Collection and Statistical Data Sources 1.7 A short history about statistics 1.8 Using softwares in statistics | 19-61 |
| Week 3: | CHAPTER 2: SUMARIZING DATA - FREQUENCY DISTRIBUTION AND GRAPHIC PRESENTATION 2.3 Organizing (grouping) and graphic presentation of qualitative data 2.4 Organizing (grouping) and graphic presentation of numerical data | 67-98 |
| Week 4:: | CHAPTER 2: SUMARIZING DATA - FREQUENCY DISTRIBUTION AND GRAPHIC PRESENTATION 2.5 Some other graphical data presentations 2.6 Cross-Tabs | 98-110 |
| Week 5:: | CHAPTER 3: Measures of Central Tendency 3.2 Measures of Central Tendency – importance and applications 3.3 Arithmetic and geometric mean for ungrouped and grouped data. | 121-133 |
| Week 6: | CHAPTER 3: MEASURES OF CENTRAL TENDENCY 3.5 Median, mode for ungrouped and grouped data 3.7 Links between mean, median, and mode. | 133-142 144-152 |
| Week 7: | CHAPTER 4: MEASURES OF DISPERSION AND SKEWNESS 4.2 Why variation or distribution should be studied ? 4.3 Measures of Dispersion and Skewness of ungrouped and grouped data (standard deviation and variance, range, coefficient of variation, coefficient of skewness, etc) | 153-168 |
| Week 8: | CHAPTER 4: MEASURES OF DISPERSION AND OTHER DATA DESCRIPTION INDICATORS 4.5 Other measures related to data (Z- Score, Empirical rule) 4.6 Other descriptive statistics (quartile, percentile, interquartile range, Box plot) 4.7 Use of "Descriptive Statistics" in Excel | 169-195 |
| Week 9: | FIRST COLLOQUIM | |
| Week 10: | CHAPTER 13: INDEX NUMBERS 13.2 Understanding Indexes | 559-578 |

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| | 13.3 Simple index numbers, construction of index numbers, Unweighted indexes, etc). 13.4 Individual and aggregate price indices | |
| Week 11: | Chapter 13: INDEX NUMBERS 13.5 Aggregate quantity and value indices 13.6 Some special forms of aggregate indexes and their application | 578-597 |
| Week 12: | CHAPTER 12: SIMPLE REGRESSION ANALYSIS 12.3 Simple linear regression model 12.4 Estimation of the regression model: The Ordinary least squares principle, etc. | 497-520 |
| Week 13: | CHAPTER 12: SIMPLE CORRELATION ANALYSIS | 521-526 549-558 |
| Week 14: | CHAPTER 14: AN INTRODUCTION TO THE TIME SERIES ANALYSIS 14.2 Components of time series. 14.3 Trend and forecast estimation with the linear trend method. | 597-625 |
| Week 15: | SECOND QOLLOQUIM | |

Academic Policies and Code of Conduct

We start and finish class on time.

Tools used during class must be cleaned and stored away at the end of class.

Mobile/smart phones, and other electronic devices (e.g. iPods) must be turned off (or on vibrate) and hidden from view during class time.

Laptop and tablet computers are allowed for quiet use only; other activities such as checking personal e-mail or browsing the Internet are prohibited.