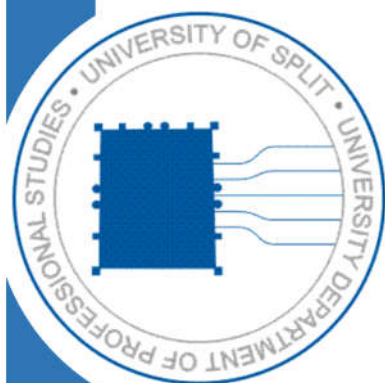


# Course syllabus

## Business Statistics



## COURSE DETAILS

|                                                      |                                                                                                                           |    |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----|
| <b><i>Type of study programme</i></b>                | Undergraduate professional study programme- 180 ECTS                                                                      |    |
| <b><i>Study programme</i></b>                        | BUSINESS TRADE                                                                                                            |    |
| <b><i>Course title</i></b>                           | Business statistics                                                                                                       |    |
| <b><i>Course code</i></b>                            | STP009                                                                                                                    |    |
| <b><i>ECTS<br/>(Number of credits allocated)</i></b> | 5                                                                                                                         |    |
| <b><i>Course status</i></b>                          | Core                                                                                                                      |    |
| <b><i>Year of study</i></b>                          | First                                                                                                                     |    |
| <b><i>Course Web site</i></b>                        | <a href="https://moodle.oss.unist.hr/course/category.php?id=21">https://moodle.oss.unist.hr/course/category.php?id=21</a> |    |
| <b><i>Total lesson hours per semester</i></b>        | Lectures                                                                                                                  | 15 |
|                                                      | Laboratory exercises & practical demonstration                                                                            | 30 |
| <b><i>Prerequisite(s)</i></b>                        | None                                                                                                                      |    |
| <b><i>Lecturer(s)</i></b>                            | Mathematics and Physics Unit:<br>Nada Roguljić, lecturer<br>Julija Mardešić, lecturer                                     |    |

## COURSE DESCRIPTION

|                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><i>Course Objectives:</i></b>                                                                                         | Enable students for using the computer program MS Excel, apply basic statistical techniques and methods for grouping, tabular and graphical display, analysis and interpretation of statistical data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b><i>Learning outcomes</i></b><br><br><b><i>On successful completion of this course, student should be able to:</i></b> | <ol style="list-style-type: none"> <li>1. explain basic statistical concepts such as statistical collection, species characteristics, statistical series, tabular and graphical representation of data, measures of central tendency, dispersion and asymmetry, correlation and regression analysis, time series analysis</li> <li>2. apply knowledge to solve simple tasks using computer (MS Excel)</li> <li>3. independently calculate basic statistical parameters (mean, measures of dispersion, correlation coefficient, indexes)</li> <li>4. based on the acquired knowledge to interpret the meaning of the calculated statistical indicators</li> <li>5. choose a statistical method for solving practical problems</li> </ol>                                                                                               |
| <b><i>Course content</i></b>                                                                                             | <p>The concept and mission of statistics: the place and role of statistical methods in monitoring economic phenomena, statistical collection, types of characteristics. Basic methods of data analysis: formation of statistical series, their tabular and graphical presentation, the underlying characteristics of numerical sequences, measures of central tendency, measures of dispersion and variability. The concept and method of sampling tasks: sample types, examples of applications in product quality testing, receipt of goods, market research, etc. Regression and correlation analysis: correlation coefficient, linear and nonlinear regression models. Basic time series analysis: a graphical display and comparison, the numerical analysis of time series, individual and group indices, deflation, trend.</p> |

## CONSTRUCTIVE ALIGNMENT – Learning outcomes, teaching and assessment methods

| Alignment of students activities with learning outcomes |                                  |                      |
|---------------------------------------------------------|----------------------------------|----------------------|
| Activity                                                | Student workload<br>ECTS credits | Learning<br>outcomes |
| <i>Lectures</i>                                         | 15 hours / 0,5 ECTS              | 1,2,3,4,5            |
| <i>Laboratory work</i>                                  | 30 hours / 1 ECTS                | 3,4,5                |
| <i>Two mid-term exams (preparation and delivery)</i>    | 30 hours / 1 ECTS                | 3,4,5                |
| <i>Self-study</i>                                       | 60 hours / 2 ECTS                | 1,2,3,4,5            |
| <i>Office hours and final exam</i>                      | 15 hours / 0,5 ECTS              | 1,2,3,4              |
| <b>TOTAL:</b>                                           | <b>150 hours / 5 ECTS</b>        | <b>1,2,3,4,5</b>     |

| CONTINUOUS ASSESSMENT                     |                          |                          |
|-------------------------------------------|--------------------------|--------------------------|
| Continuous testing indicators             | Performance<br>$A_i$ (%) | Grade ratio<br>$k_i$ (%) |
| <i>Class attendance and participation</i> | 50 - 70                  | 5                        |
| <i>Laboratory work</i>                    | 70 - 100                 | 5                        |
| <i>First mid-term exam</i>                | 45 -100                  | 45                       |
| <i>Second mid-term exam</i>               | 45 -100                  | 45                       |

| FINAL ASSESSMENT                                                           |                          |                          |
|----------------------------------------------------------------------------|--------------------------|--------------------------|
| Testing indicators – final exam (first and second exam term)               | Performance<br>$A_i$ (%) | Grade ratio<br>$k_i$ (%) |
| <i>Practical exam (written)</i>                                            | 50 - 100                 | 90                       |
| <i>Previous activities<br/>(include all continuous testing indicators)</i> | 50 - 100                 | 10                       |
| Testing indicators – makeup exam (third and fourth exam term)              | Performance<br>$A_i$ (%) | Grade ratio<br>$k_i$ (%) |
| <i>Practical exam (written)</i>                                            | 50 - 100                 | 100                      |

| PERFORMANCE AND GRADE |                                                    |                 |
|-----------------------|----------------------------------------------------|-----------------|
| Percentage            | Criteria                                           | Grade           |
| 45% - 59%             | <i>basic criteria met</i>                          | sufficient (2)  |
| 60% - 74%             | <i>average performance with some errors</i>        | good (3)        |
| 75% - 89%             | <i>above average performance with minor errors</i> | very good (4)   |
| 90% - 100%            | <i>outstanding performance</i>                     | outstanding (5) |

### ADDITIONAL INFORMATION

Teaching materials for students (scripts, exercise collections, examples of solved exercises), teaching record, detailed course syllabus, application of e-learning, current information and all other data are available by MOODLE system to all students.