Course Syllabi

CODE 205

NAME Statistics Methods

Credits 6 ECTS

Period Fall Semester

Course Specifications
Classes will be held in the classroom and will include lectures, problem-solving sessions, and practical activities. Individual work and active participation are expected throughout the course.
GitHub will be used as a supporting platform for the management of practical assignments and collaborative work. Students are therefore encouraged to have a basic knowledge of version control systems and repositories.

Objectives and Contents
The course provides an introduction to the fundamental concepts and methods of Statistics. It aims to develop the ability to describe and analyse data, understand the basic principles of probability, and apply statistical inference techniques to solve practical problems. Throughout the course, students will acquire the knowledge and skills required to interpret statistical results and make informed decisions based on data.

Contents

1. Descriptive Statistics: Descriptive Statistics for One and Multiple Variables.
2. Statistical Models: Simple and Multiple Linear Regression. Statistical Modelling.
3. Time Series: Time Series Decomposition.
4. Probability Calculation: Probability. Random Variables and Distributions. Notable Distributions.
5. Statistical Inference: Point Estimation and Confidence Intervals. Parametric Hypothesis Testing. Non-Parametric Estimation.

Assessment
The assessment model will be as follows:

- Two partial examinations will be conducted during the course and will account for 77% of the continuous assessment grade.
- Practical assignments will account for the remaining 23% of the continuous assessment grade.

The continuous assessment grade will be expressed on a scale from 0 to 10 and will be obtained by applying the above weightings. Students who obtain a continuous assessment grade of 5 or higher, having completed the compulsory practical assignments, will pass the course and will not be required to take the final examination. Students who do not pass the continuous assessment may take the final examination.

Final Grade
For students taking the final examination, the final grade will be the higher of:

- the grade obtained through continuous assessment;

- the grade obtained by applying the following weighting:
    - 60% final examination;
    - 40% continuous assessment.

Ordinary Examination Sessions
The assessment system described above will apply to both ordinary examination sessions.
In the second ordinary examination session, students who have not passed the course through continuous assessment may take the final examination. The final grade will be calculated using the same criteria described above.
Extraordinary Examination Sessions
In extraordinary examination sessions, assessment will consist of a single final examination covering all the learning outcomes of the course.
Minimum Assessment Requirements
To be assessed in the course, students must participate in at least one partial examination; and complete the compulsory practical assignments.
A student will be considered **NOT PRESENTED** if they do not complete the minimum assessment requirements.
A student will be considered **PRESENTED** if they participate in any assessable activity.

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