

Probability Theory 2

2025/26 II. Semester

Code: BMETE95AM30 **Curriculum:** 2/2/0/V/4

Language: English

Instructor: Balázs Bárány

Tutor: Ákos Urbán

Homework. During the semester, there will be weekly homework exercises (12 in total), for which a total of 40 points can be earned. Points for homework submitted after the deadline but within two days will be reduced by 30%. Homework submitted more than two days after the deadline can be accepted only in a very justifiable case.

The homework shall be submitted via the course's Moodle page.

Midterms. There will be two 45-minute midterm tests during the semester, where altogether 30-30 points can be gained.

1. Midterm 7th week (31st of March, during the practice).
2. Midterm. 14th week (26th of May, during the practice).

Conditions for obtaining the signature. The student must achieve at least 30% of the obtainable points on the midterm tests (9-9 points) and on the homework (12 points).

Supplementary and correction possibilities. Both midterm tests can be retaken (the retake of the first midterm is in the 9th week, and the second is in the 15th week). The results of the retaken test always replace the results of the originals in any case (even if it is worse). We advertise the exact time and place of the retake tests later.

Exam. The subject ends with an exam. Only students who received the signature can attend the exam. The exam has two parts, a written and an oral examination. Students can earn 100 points on the written part of the exam. The written exam consists of a theoretical and a problem-solving section, with particular emphasis on exercises not included in the midterm tests. The minimum score required for a successful exam is 40%. The exam of students who did not achieve 40% is automatically considered inadequate and a failure (elégtelen (1)). The final mark is based on the sum of points from the homework, midterm tests, and performance on the exam (a total of 200 points).

The final degree is given by the final score p as follows:

$$\begin{aligned} 0 \leq p < 79 & \text{ fail} & (\text{elégtelen (1)}), \\ 80 \leq p < 109 & \text{ pass} & (\text{elégséges (2)}), \\ 110 \leq p < 139 & \text{ satisfactory} & (\text{közepes (3)}), \end{aligned}$$

Students who score at least 140 points are invited to the oral exam. The oral exam covers the topics from the theoretical lectures. Students who do not accept the invitation automatically receive the grade "good (jó (4))". Those who accept it, depending on their final point, get 2 topics (if $140 \leq p < 169$) or 1 topic (if $170 \leq p$) from the list of Topics. Depending on their performance on the oral exam, the student might receive the grade "excellent (jeles (5))", or, with inadequate performance, "good (jó (4))".

Budapest, 31st January 2026.

Balázs Bárány
Instructor