University of Primorska
Faculty of Mathematics, Natural Sciences and Information Technologies
Mathematical Methods – Semester 1 (01. 10. 2026 – 22. 01. 2027)

Lecturer: Asist. Prof. Dr. Aleksander Simonič
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Office: Galeb, floor 2
Office hours: By appointment (e-mail)
Lectures are scheduled on Tuesdays from 13:00 to 15:00 in InnoRenew–Pseudotsuga.
Seminars are scheduled on Wednesdays from 10:30 to 12:00 in InnoRenew–Pseudotsuga.
Free days: 21. 10. 2026 and 28. 12. 2026 – 01. 01. 2027.

Content:

Logic and set theory, number sets, functions, vectors and analytic geometry, matrices and systems of linear equations, determinants, eigenvalues and eigenvectors, least-squares method, number sequences and series, continuity and limit, differentiation and integration, combinatorics and probability.

Literature:

(1) Lecture Notes.
(2) T. M. Apostol, *Calculus, Vol. 1: One variable calculus, with an introduction to linear algebra*, 2nd ed., John Wiley & sons, 1967.

Assessment:

Written exam, consisting of two parts, theoretical and (computationally based) practical. Theoretical part is worth 30% and practical part is worth 70%. The exam can be replaced by two colloquiums that have the same structure and weights.

Only the use of pen is allowed for theoretical part of the exam, while additionally one A4 paper "cheat-sheet" and a pocket calculator are allowed for practical part of the exam.

It is mandatory for students to enlist in the system ŠIS before attending the exam. Students who successfully pass the colloquiums should also enlist to one of the available (preferably the earliest possible) exam terms.

Criteria: $\cdot < 50\%$ (5), $50\% \leq \cdot < 60\%$ (6), $60\% \leq \cdot < 70\%$ (7), $70\% \leq \cdot < 80\%$ (8), $80\% \leq \cdot < 90\%$ (9), $\cdot \geq 90\%$ (10).