

Calculus (AM ang) 2025-26

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The course consists of two components: 15 lectures + 15 classroom tutorials.

The tutorial groups are divided into three lecture blocks, which are delivered on Tuesdays.

The **lectures, homework problems and course information** are posted in the site below (which I shall call "*my ftp*"):

/public/eturska/CALCULUS_2025-26

To access these files, you need a VPN or some other SFTP client, see

[SFTP \(Z: Drive, www folder, public folder\) – BSS PJATK](#)

The homework tasks and solutions are the basis for your self-study and are **not collected or graded**. They are accompanied by solutions and tips for selected problems. Any questions concerning the tasks should be asked at the Tutorials or Lectures.

The problems on the midterm tests and on the exam cover the material presented in the lectures, tutorials, or homework files.

Course grades

There are two course grades – one for the Tutorials and one for the Final Examination. Passing the tutorials is a prerequisite for the Final Examination.

TUTORIALS

Attendance

- Attendance in the Tutorials is compulsory. Only **3 unexcused absences** from the Tutorials are allowed.
- Excuses should be delivered (also by email) to the Instructor at most 14 days after the absence. Chronic illnesses are to be discussed with the Dean or the Lecturer.
- In all cases, it is *the responsibility of the student* to obtain the material that was missed during any class time (lecture or tutorial) and be aware of all announcements made during any class time.

Midterm tests

There will be **2 midterm tests** and one retake test at the end of the semester (each 90 minutes for maximum of 50 points). The tests will consist of a combination of open and multiple-choice questions. **The problems on the tests will reflect the material presented in the tutorials and lectures with homework files** posted on CALCULUS_2025-26

Test1

Groups from	Date
Tuesdays	04.11.25
Wednesdays	05.11.25
Thursdays	06.11.25
Fridays	07.11.25

Test2

Groups from	Date
Wednesdays	14.01.26
Thursdays	15.01.26
Fridays	16.01.26
Tuesdays	20.01.26

- In the midterm tests and final examination no EXTERNAL SOURCES OF KNOWLEDGE, such as **electronic devices** (e.g. calculators, mobile phones, smartwatches, smart glasses, smart pens, microphones etc.), textbooks, exercise books or any other medium are allowed during the tests, quizzes and the final examination. Anyone possessing such an electronic device during the test or anyone discovered to be plagiarising will **automatically obtain 0 points** for the test or examination.
- You can have the formula sheet handed to you by the instructors. Nothing can be entered on the sheet.
- The notation and definitions introduced in the lectures are binding, not the ones that are used in other lectures, textbooks, etc. You can only use the formulas and algorithms given in the lectures. The use of other (even correct) formulas will be considered as a lack of solution
- After a midterm test or examination, any student may be questioned orally without any reason being given or on a random basis. This verifies the student's knowledge and understanding of the subject covered in the test. Since tests assess knowledge, students may be asked to justify their responses to closed questions, even if they selected them at random during the test.

Pass threshold

To obtain a pass for the tutorials the student must first pass the threshold with at least 51 points entirely from the midterm tests.

Retakes

If a student does not achieve the minimum score of 51 points, or wants to improve her/his score, he/she can retake a test under the following conditions:

- has taken at least one of the midterm tests on the first date,
- has at most 3 unexcused absences or 6 excused ones.

Exceptions can be discussed with the instructor (or, if required, with the lecturer or Dean).

- The retake is held **on the last tutorial** of the semester. In certain circumstances, the instructor may change the date.
- Only one test and **only once** can be retaken
- The instructor decides which test the student must retake. In special cases, at the request of the student, the instructor may change the decision.
- The score of the first attempt is crossed out and the retake test score replaces it, even if it is lower.
- A score of at least 51 points is still required to pass the tutorials.

Tutorial grade

Only when you pass the tutorials, the instructor can add additional points (0-10 points) to the test points. These extra points are awarded for your performance in the tutorials and lectures (e.g. mistakes found in the homework files or lectures published on the 'ftp').

Therefore, your final **tutorial grade** is determined by the sum of points earned from two midterm tests and the additional points that are granted by the Instructor.

<i>Score</i>	<i>Tutorial grade</i>
< 51	2.0
51 - 60	3.0
61 - 70	3.5
71 - 80	4.0
81 - 91	4.5
92 - 100	5.0
101 -110	5.0

Exemption policy

To be **exempted** from the Final Examination you need to:

- Receive a grade of at least 4,5 for the tutorials (in both tests or retake).
- Pass an additional quiz (15 minutes) covering the material of the last lectures.
- inform the Instructor that you are taking this option.

The grade for the Final Examination is the same as the one you obtained for the tutorials.

FINAL EXAMINATION

- **Only students who have passed the tutorials can take the Final Examination.**
- The Final Examination consists only of Multiple Choice Questions and covers the whole material of the semester (tutorials, lectures and homework files posted on CALCULUS_2025-26).
- It, as well as the retake of the Final, will take place in February during the examination session.
- The grading scale for the will be announced later.
- After the exam, the rough draft sheets are collected.
- As in the midterm tests, any student may be questioned orally without any reason being given or on a random basis.

RECOMMENDED LITERATURE

1. J. Stewart, „*Calculus. Concepts and Contexts*”
2. M. D. Weir, J. Hass, F. R. Giordano, „*Thomas' Calculus*” (Pearson edition)
3. E. Larson, „*Calculus*”
4. E. Mendelson, F. Eyres, „*Calculus*”
5. B. H. Edwards, R.P. Hostetler, R. E. Larson, „*Calculus with Analytic Geometry*”
6. H. C Edwards, „*Calculus*”
7. D. E. Penny, H. C. Edwards, „*Calculus*”
8. M. Spiegel, R. Wrede, „*Theory and Problems of Advanced Calculus*”
9. Sh. K. Stein, „*Calculus and Analytic Geometry*”
10. J. Fritz, R. Courant, „*Introduction to Calculus and Analysis*”

Recommended Literature in Polish

1. M. Gewert, Z Skoczyłas: "Analiza Matematyczna 1. Definicje, twierdzenia, wzory"
+ "Analiza Matematyczna 1. Przykłady zadania"
2. M. Gewert, Z Skoczyłas: "Analiza Matematyczna 2. Definicje, twierdzenia, wzory"
+ "Analiza Matematyczna 2. Przykłady, zadania"

Web sites (they are not a substitute for the lectures):

<http://www.3blue1brown.com/> (ESSENCE OF CALCULUS)

<https://www.learnamic.com/resource-providers/patrickjmt>

<http://www.khanacademy.org/>

<http://tutorial.math.lamar.edu/>

<http://www.wolfram.com/language/fast-introduction-for-math-students/en/>

<https://www.coursera.org/courses>

<https://ocw.mit.edu/courses/res-18-005-highlights-of-calculus-spring-2010/>

1 pt. ECTS = 30 hrs

6 pt. = 150 hrs = 30 hrs (lectures) + 30 hrs (tutorials) + 120 hrs (homework)

120 hrs /15 weeks = 8 hrs per week