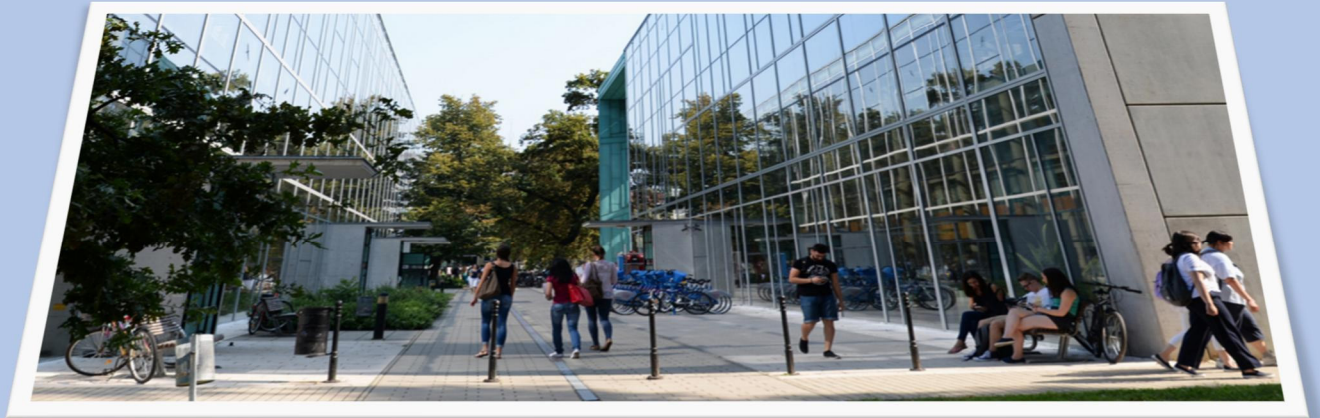




TRAINING PLAN FOR PhD STUDENTS AT THE DEPARTMENT OF BIOPHYSICS AND CELL BIOLOGY

**Biophysics Program (Biophysical Questions and
Investigation Methods)**

Section of Molecular Medicine

Doctoral School of Medicine

University of Debrecen



<https://modi.unideb.hu>

<https://biophys.unideb.hu>

Updated: Sep, 2026

OBLIGATORY COURSES

1. Biophysics for Life Sciences

- Enroll in the “Biophysics for Life Sciences” (OT-MODI-T39) course available in the 1st semester of every academic year.
- Attend the classes of the biophysics course for molecular biology MSc students.
- Two classes each week. Timetable and curriculum are available at <https://biophys.unideb.hu/en/node/344>.
- All lectures covered in the course are required.
- Exam: Written. The test will be different from the one the medical/dentistry/molecular biology students write.
- Credit: 2

2. Cell Biology Lecture Course

- Enroll in the “Cell Biology” (OT-GDI-T78) course available in the 2nd semester of every academic year.
- Attend the cell biology classes of general medicine students (two lectures and two seminars per week. Students decide which general medicine group to join. Timetable is available at <https://biophys.unideb.hu/en/node/315>. Attendance at the seminars is not required).
- Curriculum: All topics from the lecture course for medical students, available at <https://biophys.unideb.hu/en/node/315>.
- Exam: a written exam held on pre-announced dates. The test will be different from the one the medical/dentistry/molecular biology students write.
- Credit: 3

3. Basic Concepts of Biostatistics

- Enroll in the “Basic Concepts of Biostatistics” (OT-MODI-T33) course available in the 1st semester of every academic year.
- Attend the biostatistics lectures and seminars of general medicine students.
- Curriculum: All topics from the course for medical students supplemented

with the following three classes to be held separately:

- Multiple comparisons, ANOVA
- Linear regression, correlation and fitting
- Doing statistics in Excel (two classes with hands-on training)

Curriculum is available at <https://biophys.unideb.hu/en/node/295/>.

- Attendance at the general medicine lectures and seminars is required. Students decide which general medicine group to join between weeks 2-10, timetable is available at <https://biophys.unideb.hu/en/node/295/>. The three extra topics above will be held from week 11 on dates discussed with the students.
- Exam: a written exam held on pre-announced dates. The test will be different from those the medical/dentistry/molecular biology students write. Students cannot write the grade offering test during the teaching period.
- Credit: 3

4. General Research Methods

- Available every academic year, course code: DEAKIDI_EN
- Not held by the Department of Biophysics and Cell Biology
- Exam: online test
- Credit: 1

5. Lecturing, Grant and Paper Writing

- Available in the second semester of every academic year
 - Further details: to be announced later
- In courses 1-3 (Biophysics for Life Sciences, Cell Biology Lecture Course, Basic Concepts of Biostatistics)
 - students who completed one or more of the courses in their previous studies are exempted, and will get the credit without taking the course or the exam
 - the exam consists of one part, i.e. it is not required to pass a minimum requirement tier first

- one exam day, announced at the beginning of the semester, will be available for A-chance exams, which will be on separate days for those courses available in the same semester; further exam days will be announced for B- and C-chance exams if required
- Grading:
 - $60\% > \text{score} \geq 50\%$ – pass
 - $70\% > \text{score} \geq 60\%$ – satisfactory
 - $80\% > \text{score} \geq 70\%$ – good
 - $\text{score} \geq 80\%$ – excellent

Full credit is obtained for any passing grade.
- Grade-offering, exemption and mid-semester, self-control tests for bonus points will not be available for PhD students.

OPTIONAL, SUGGESTED COURSES

These courses are available once every two years so that PhD students have a chance to register for them during the first two years of their PhD training. These are only suggested courses, other ones can also be chosen from the list of available courses.

- **Principles and applications of digital image analysis (OT-MODI-T50)**
- **MATLAB for all beginners (OT-MODI-T65)**
- **Studying protein-protein interactions by fluorescence methods (OT-MODI-T17)**
- **Basics of ion channels and electrophysiological techniques (OT-MODI-T63)**