

REQUIREMENTS for

Physics 3 & Modern Physics for Chemical Engineers

02.18.2025

Code: BMETE11MX01 and BMETE14MX00; **Theory/practice/credits** 2/2/4
Term: 2023/24/2; **Language:** English

Lecturers: Péter Richter and András Sólyom

Short syllabus

1. Quantum mechanics
2. Solid State Physics

Attendance requirements. At least 70 % of the practices must be attended. The attendance register is circulated at every occasions.

In-semester requirements: Two successful written tests is required. These contain numerical problems only and are worth 50 points each. To pass the tests minimum 20 points/test (40%) is required.

Those who fail at any of these tests will have one possibility to correct this without any repercussion. If they fail again there will be one more (*final*) supplementary test in the exam period, but that carries the penalty of payment.

Requirement for a Signature: Fulfill *both* attendance and test requirements.

Examination: Only students with a valid signature for the semester may participate in the examination. **IMPORTANT:** without valid signature students neither can enlist to the cross-semester examination course!

*The examination starts with a short 5 questions written quiz. **3 good answer is required to proceed** to the oral part of the examination.*

Both the questions and the *answers* (!) are available [on the WEB page](#) under section *What You Must Know to Pass*.

After the successful quiz each student is given 1 randomly selected examination topic both from Quantum Mechanics, **and** from Solid State Physics to talk about.

Near the end of the semester a list of the few most basic ideas and formulas which *must* be known for a successful examination will be uploaded to the web page. The student still fail to pass if they know *only* these, but ***not knowing them is an automatic flunk***.

Evaluation of the semester: The examination result determines the mark. The mid-term test results does not modify the examination's result. They only needed to get the signature for your semester.

The result of the examination can be one of the following marks:

- 1 (insufficient - a repeated examination required),
- 2 (pass),
- 3 (average),
- 4 (good) and
- 5 (excellent).

Consultations: according to student demand, maximum 4 times in the semester for the whole class.