Info advanced quantum mechanics exercises WS 2026/27

(Please read carefully, including footnotes, before emailing questions)

This course comprises a problem-solving component worth up to $\sim$ 20 points (plus possible extras, including for active participation in class (VO)) and a mid-semester written exam worth up to 40 points. Use of AI is not permitted. To pass, you must mark at least 50% of the exercises [1], earn at least 16 points in the written exam, and reach a total of 30 points. A grade of "1" requires at least 35 points in the written exam and 52.5 points in total.

(I) The assigned exercises will be posted here typically 6 days in advance.

(II) Before each exercise class you must mark and upload to the Teach Center (watch the deadline and maximum file size!) which exercises you solved or at least seriously attempted. Uploads may be jointly submitted by groups of up to 3 students. [2]

(III) Anyone who marked a exercise may be randomly selected in class to present or discuss the solution, or part of it, in front of the class. A score between -1 and +2 will be assigned. Scoring focuses on understanding and on evidence that you solved the exercise yourself. Errors generally have little impact, especially if you tried seriously. Better wrong than copied!

(IV) The problem-solving score is computed as [3]
$12 \times \frac{n.marks}{total\ number\ of\ marks} + 4 \times$ *(average presentation scores)*

(V) If you marked a exercise but you are not able to present it or it is clear from your presentation that you just copied without understanding it, or you are not present in class, all marks for that day will be voided. Additionally, a penalty will be applied to the points in (IV): up to -5 the first time and up to -10 thereafter. [4]

(VI) The written exam will consist of exercises similar (same difficulty level and topic) to the assigned exercises (not the "Star" exercises).

Star exercises

Occasionally, optional exercises labeled with a star will be assigned. These can earn extra marks [5]. They are *no-risk*: you may refuse your presentation scoring, but the marks may be removed if the solution is grossly wrong.

Important issues:

(1) There will be a repetition exam (Nachklausur). You must still register for the first exam, even if you cannot attend.
(2) You will only receive a grade if you register for the written exam ("*Prüfungsantritt*").
(3) We will occasionally send important information to your TUG or UNI-Online email address or post it in the Teach Center. You are expected to read these messages regularly so you do not miss important information. Ensure messages do not go to spam and that your mailbox has space.
(4) Topics of the exercise classes, especially those after the written test, are also part of the lecture (VO) exam.

Consultation hour

A (non-mandatory) consultation hour takes place a few days before class (see TUG online). The idea is that you have already tried the exercises and you come with questions.

IMPORTANT: On the back: how to be excused for not attending class

[1] n.marks $\geq 0.5 \times$ total number of marks
[2] Even from different exercise groups.
[3] So the maximum for the first term is 12, for the second is 8 for a total of 20
[4] This does not affect the 50% marks quota you must reach.
[5] They do not count in the denominator.

Rules for Excused Absence:

There is no attendance requirement if you have not marked any exercises. If you have marked at least one exercise, attendance at the exercise class is generally mandatory.
In exceptional cases, an excused absence may be granted.
For this, please observe the following rules (to keep administration manageable):

If you intend to mark exercises, or have already done so, but have a good reason preventing attendance:

- First check whether you can attend another (TU or UNI) exercise group. In that case, inform **both** your current and the new instructor by email.
- If a good reason prevents attendance at any exercise class (TU or UNI):
  - Email your instructor no later than 2:00 PM on the day before the class (exceptions must be well justified), stating the reason (documentation may be later requested, e.g., a medical certificate).
  - Upload your fully worked solutions to the Teach Center. In this case, you must submit individually (not in groups).
  - mark the exercises yourself. Star exercises cannot be marked in this case.
  - Monitor your email, as we may have follow-up questions.
  - You may need to be available for a short interview [6] about the marked exercises via video conference later that day. Details will be sent by email (if required).

If any of the above are not met, or the reason is deemed insufficient, we may void the marks for that exercise class without further notice.

[6] A check, not necessary a full presentation