

Info advanced quantum mechanics exercises WS 2024/25

(Please read carefully, also footnotes, before asking email questions)

This course consists of a problem-solving part from which you can obtain up to ~ 20 points (plus extras, possibly also from active participation in class (VO)) and a mid-semester written exam with a maximum of 40 points. For a positive evaluation you have to carry out (mark) at least 50% of the exercises,¹ achieve at least 20 points from the written exam and 30 points in total.

- (I) The exercises that are to be solved will be posted (here) typically 6 days in advance.
- (II) Before each exercise class you have to mark and upload on the Teach Center (watch the deadline and maximum file size!) which exercises you have solved or at least seriously attempted. Uploads can be done together in groups of a maximum of 3 students.²
- (III) Whoever marked an exercise can be randomly selected during class to present / discuss the solution or a part of it in front of the class. A score between -1 and +2 will be assigned for this. This score is especially based on understanding and on how much it is clear that you solved the exercise by yourself. **Errors in general do not influence much the score, especially if you seriously tried! Better wrong than copied!**
- (IV) The points from the exercise part is calculated from
$$14 \times \frac{n.marks}{total\ number\ of\ marks} + 3 \times (average\ presentation\ scores)$$
- (V) If you marked an exercise but it is clear from your presentation that you didn't do it, or you are not present in class, the total number of marks for this day will be annulled. In addition, you receive a negative correction to the points from (IV) of up to -5 the first time and up to -10 from the second on.³

Star exercises

Occasionally, optional exercises will be assigned, labeled by a star. These exercises can bring you extra marks⁴. They are *no-risk*, meaning you can refuse your presentation points but the marks might be removed if the solution is heavily wrong. They are also not the level of exercise you will get in the exam.

Important issues:

- (1) There will be a repetition exam (Nachklausur). **You must anyway subscribe for the first exam, even if you can't attend.**
- (2) Only if you subscribe to the written exam you will be graded (*"Prüfungsantritt"*)
- (3) We will occasionally send important information to your TUG or UNI-Online e-mail address or post it in the teach center. You are, thus, expected to read these emails/information on a regular basis, in order not to miss important information! Especially, make sure that emails don't land in spam or that there is still space in your mailbox.
- (4) Topics of exercises classes, especially the ones after the written test, will also be part of the lecture (VO) exam.

Consultation hour

There is a (non mandatory) consultation hour a couple of days before class (check 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 $n.marks \geq 0.5 \times \text{total number of marks}$

²even from different groups.

³This does not affect the 50% quota of marks you have to reach.

⁴They don't count in the "denominator"

How to be excused for not attending class

You can be excused from attending class and still mark the exercises (not “star” exercises) ⁵ if you have a good reason (we may ask you to prove it) that prevents you from participating [in any of the classes \(TU or KFU\)](#) (if you attend another class, please inform **both instructors** in advance.). In that case you must observe the following procedure:

1. Send to your instructor AND to arrigoni@tugraz.at an [email BEFORE 12:00 of the day before the class](#) (exceptions must be well motivated) quoting the reason, including why you cannot attend a class on a different time.
2. You have to be available for a possible interview ⁶ about the marked exercises via video-conference later on the day. Info will be sent per email (if required).
3. Keep a frequent eye on your e-mail, in case we ask for additional information.
4. Mark and upload (**alone, not in group**) the exercise you did and, if possible, unmark your star exercises

In case one or more of the above points are not fulfilled, or if we believe that the reason is not sufficient, we take the liberty to cancel your marks without informing you.

⁵If you don't mark any exercise, participation in class is not mandatory (but still recommended).

⁶A check, not always a presentation