

# Physics 314 - Syllabus, Spring 2025

## 1 Home page.

All important communication will be done via [http://physics.wm.edu/~evmik/classes/2025.spring\\_Quantum](http://physics.wm.edu/~evmik/classes/2025.spring_Quantum)  
Do not bother looking at BlackBoard.

## 2 General class information.

- Instructor: [Eugeniy E. Mikhailov](#)
- Class Time: TR 9:30 - 10:50 am, Small 233
- Text book: A Modern Approach to Quantum Mechanics, by John S. Townsend (2nd ed.) Phys313 (QM I) used the same textbook.

### 2.1 Office hours.

I am available at my office SmallHall 253, or in the superposition of my labs 032, 034, or 065.

- Thursday 11am-12pm
- by [appointment](#)

### 2.2 Course Overview.

This course is a continuation of our study of non-relativistic quantum mechanics. We will explore more advanced techniques and study specific examples from atomic, solid state, and nuclear physics. Over the course of the second semester, we will work through part II of the text book, including Perturbation Theory, Variational Principle, Identical Particles, Scattering, and other advance topics.

## 3 Evaluations.

Your final grade for the course will be determined from the following grading weight distribution:

- Lectures attendance is optional
- Homeworks: 25%
  - The lowest homework score (only one) will be dropped.
  - Deadline on Thursday 11:59pm.
  - I will not accept submissions for grading 2 weeks past the deadline (without prior arrangement).
  - Late submission penalty: 5% per each day from maximally possible 100% but it will not exceed 50%.
- In class Midterms (2 of them): 40%
- Final Exam: 35%

### 3.1 Homework.

One of the most important part of the class is to assess your own understanding of the material. There is a big jump between being told what to do and being able to do it by yourself. The homework prepares you and reveals voids in comprehension. It super good idea to attempt solving homework **before** deadline, than you can ask questions which will help you to move forward. I encourage group work, i.e. feel free to work together and talk about solution strategies. But the written submission should be your own, i.e. work on final calculation write up alone. I suggest to close your “strategy” notes and see that you can make the calculations. It will give you proper feedback and self assessment of your readiness for exams.

### 3.2 Extension.

You can ask for extension (for any reason) **before** the deadline. It will be granted. It is intended for occasional cases, i.e. you have an incoming midterm in another class, visit to another school, etc. If you constantly need extensions, you are doing something wrong and it has to change. Consequently, the extension granting policy will change.

### 3.3 Illness or other life changing emergencies.

Clearly, those cases are considered separately. Notify the instructor, so the arrangements can be made.

### 3.4 Grading scheme.

Grade	Score percentage	Grade	Score percentage	Grade	Score percentage
		A	94-100	A-	90-94
B+	87-90	B	84-87	B-	80-84
C+	77-80	C	74-77	C-	70-74
D+	67-70	D	64-67	D-	60-64
F	<60				

## 4 Mental and Physical Well-Being.

William & Mary recognizes that students juggle different responsibilities and can face challenges that make learning to help students navigate emotional/psychological, physical/medical, material/accessibility concerns , including:

- The W&M Counseling Center at (757) 221-3620. Services are free and confidential.
- The W&M Health Center at (757) 221-4386.
- For academic support such as tutoring, time management, study skills, and academic coaching, please contact Academic Wellbeing at [wm.edu/academicwellbeing](http://wm.edu/academicwellbeing) ([academicwellbeing@wm.edu](mailto:academicwellbeing@wm.edu))

- For concerns about the wellbeing of a member of the William & Mary community or to seek assistance for interpersonal, academic, and wellness challenges, please contact Care Support Services at [wm.edu/care](http://wm.edu/care) ([care@wm.edu](mailto:care@wm.edu))
- For other resources available to students, see <https://tinyurl.com/wmmentalhealth>

## **5 ADA Accommodation.**

William & Mary accommodates students with disabilities in accordance with federal laws and university policy. Any student who feels they may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2512 or at [sas@wm.edu](mailto:sas@wm.edu) to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see <http://www.wm.edu/sas>.