# General Physics B, Spring 2023, syllabus and important items

**Textbook**: Richard Wolfson, Essential University Physics, 4<sup>th</sup> Edition

Time: Tuesday and Friday, 8:30 am – 9:50 am

**Exams**: The exams will be unified with the Chinese-speaking classes. They will be held at 8:20 am - 9:50 am at the same place as regular classes. No dictionaries, papers, or personal notes are allowed. You may bring a non-programmable calculator.

#### **Grades**:

25 % each for the two mid-term and final exams. 25 % from homework and quiz.

#### Homework:

The table below lists the problem sets assigned for this class (from the textbook). Log on to the NTHU eLearn system to submit your homework. Note that the numbers quoted in the problem sets may be different online, so you need to solve the problems accordingly. The due dates for the problem sets are listed on the eLearn system. The rest of the problems are for your own sake. For the mid-term and final exams, these problem sets and examples in the textbook will be used as references.

#### **Tutorial class:**

In **R501** of the Physics Building, 19:00~21:00 (The exact schedule will be posted on elearn system). In case of the access control at night, please enter the building by Door No.3 (south entrance, near the Mong Man Wai Building).

## Other:

Please turn off your cell phones during classes and exams. If you cannot attend the exam, ask for permission beforehand otherwise you will not get any points for that exam (no adjustment at the end of the semester).

### Homework:

For the first midterm exam			
Chap 20: <u>19, 26, 34, 42, 46, 48, 57, 69, 73, 77</u>	Chap 23: <u>13, 26, 32, 38, 46, 57, 60, 64, 65, 69</u>		
Chap 21: 14, 20, 24, 32, 44, 55, 66, 68, 71, 74	Chap 24: <u>18, 30, 46, 49, 53, 66, 69, 71, 72, 73</u>		
Chap 22: <u>16, 23, 40, 52, 61, 67, 72, 76, 80, 81</u>			
For the second midterm exam	For the final exam		
Chap 25: <u>27, 32, 50, 61, 70, 72, 73, 79, 80, 83</u>	Chap 29: <u>11, 14, 27, 40, 41, 50, 57, 62, 69, 70</u>		
Chap 26: 24, 27, 45, 48, 51, 63, 76, 78, 80, 84	Chap 33: <u>12, 16, 21, 40, 44, 48, 57, 60, 67, 70</u>		
Chap 27: <u>13, 19, 20, 21, 37, 45, 61, 70, 71, 77</u>	Chap 34: <u>13, 17, 23, 33, 54, 67, 71, 75, 76, 78</u>		
Chap 28: <u>19, 23, 26, 31, 45, 55, 58, 61, 67, 71</u>	Chap 35: <u>11, 14, 17, 18, 26, 36, 43, 52, 55, 58</u>		

# Schedule

week	date	chapter	covered material
1	02/14	Ch 20	Electric Charge, Force, and Field
	02/17		
2	02/21	Ch 21	Gauss's Law
	02/24	Ch 22	Electric Potential
3	02/28	Holiday (228 peace commemoration day)	
	03/03	Ch 23	Electrostatic Energy and Capacitors
4	03/07		
	03/10	Ch 24	Electric Current
_	03/14		
5	03/17	/17 Quiz or backup class	
7	03/21	First midterm exam (Ch20 – 24)	
	03/24	Ch 25	Electric Circuits
	03/28		
	03/31	Ch 26	Magnetism: Force and Field
8	04/04	Holiday (Tomb Sweeping Festival)	
	04/07	Ch 26	Magnetism: Force and Field
9	04/11		
	04/14	Ch 27	Electromagnetic Induction
	04/18		
10	04/21	Ch 28	Alternating-Current Circuits
11	04/25		
11	04/28	Quiz or backup class	
12 -	05/02	Second midterm exam (Ch 25 – 28)	
	05/05	Ch 29	Maxwell's Equations and Electromagnetic
	05/09		Waves
	05/12	Ch 33	Relativity
14	05/16		
	05/19		
15	05/23	Ch 34	Particles and Waves
	05/26		
16	05/30		Quantum Mechanics
	06/02	Ch 35	
17	06/06		
	06/09	Quiz or backup class	
18	06/13	Final exam (Ch 29, 33 – 35)	

Tuesday Friday