## General Physics B, Spring 2024, 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

<u>am</u> 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.

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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: <u>14, 20, 24, 32, 44, 55, 66, 68, 71, 74</u>	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: <u>24, 27, 45, 48, 51, 63, 76, 78, 80, 84</u>	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
	02/20		Floateis Charges Found and Field
1	02/23	Ch 20	Electric Charge, Force, and Field
2	02/27	Ch 21	Gauss's Law
2	03/01	- Ch 22 - Ch 23	Electric Potential Electrostatic Energy and Capacitors
•	03/05		
3	03/08		
	03/12		
4	03/15		
	03/19	Ch 24	Electric Current
5	03/22	First midterm exam (Ch20 – 24)	
6	03/26		Electric Circuits
	03/29	Ch 25	
_	04/02	Ch 26	Magnetism: Force and Field
7	04/05	Holiday (Tomb Sweeping Festival)	
	04/09		
8	04/12 Ch 26	Magnetism: Force and Field	
	04/16		Electromagnetic Induction
9	04/19	Ch 27	
10	04/23		
10	04/26	- Ch 28	Alternating-Current Circuits
	04/30		
11	05/03	Second midterm exam (Ch 25 – 28)	
	05/07	- Ch 29	Maxwell's Equations and Electromagnetic Waves
12	05/10		
12	05/14	5/14 5/17 Ch 33	
13	05/17		Relativity
	05/21		
14	05/24	Ch 34	Particles and Waves
	05/28		
15	05/31	- Ch 35	
16	06/04		Quantum Mechanics

	06/07	Final exam (Ch 29, 33 – 35)
17	06/11	backup class_03/20(Wed) 22:00-23:00 On line First midterm Quiz
06,	06/14	backup class_05/01(Wed) 22:00-23:00 On line Second midterm Quiz
18	06/18	backup class_06/05(Wed) 22:00-23:00 On line Final exam Quiz

Tuesday Friday