

## Physics 5A - Fall 2024

**Instructor:** Oskar Hallatschek

**Lecture Times:** Tu Th 9:40 AM - 11:00 AM

**Location:** 3 Physics Building

Week	Lecture Days	Topics	Reading	Homework On
1	Aug. 27	Introduction. Vectors, Approximations	KK 1.1-1.11	
2	Sep. 3	Kinematics	KK 1.1-1.11	Math review / KK 1
	Sep. 5	Newton's Laws I	KK 2.1-2.10	
3	Sep. 10	Newton's Laws II	KK 2.1-2.10	KK 1-2
	Sep. 12	Forces I	KK 3.1-3.6	
4	Sep. 17	Forces II	KK 3.1-3.6	KK 2-3
	Sep. 19	Momentum I	KK 4.1-4.10	
5	Sep. 24	Momentum II	KK 4.1-4.10	KK 3-4
	Sep. 26	Energy I	KK 5.1-5.8	
6	Oct. 1	Energy II		KK 4-5
	Oct. 3	Angular Momentum I	KK 7.6-7.9	
7	Oct. 8	Rigid Body Motion I	KK 8.1-8.6	KK 6-7
	<b>Oct. 10</b>	<b>Midterm I</b> in class	<b>KK Ch 1-5</b>	
8	Oct. 15	Rigid Body Motion II (substitute	KK 8.1-8.6	KK 7 - 8

		teacher)		
	Oct. 17	Non-inertial reference frames / Central Force Motion	KK 9, 10	
9	Oct. 22	Periodic Motion	F1, F2	KK 8-10
	Oct. 24	Superposition	F1, F2	
10	Oct. 29	Oscillations	F2-3	F1-2
	Oct. 31	Forced Oscillations	F4	
11	Nov. 5	Coupled Oscillations	F5	F2-3
	Nov. 7	Waves	F6,7	
12	Nov. 12	Waves, Fluids	F6,7 ; TBD	F4-5
	<b>Nov. 13</b>	<b>Midterm II</b>	<b>KK Ch 7, 8, 10; F 1, 2</b>	
	Nov. 14	Fluids	TBD	
13	Nov. 26	Relativity I, Lorentz Transformations	KK 12.1- 12.10	F6,7
	Nov. 28	No Lecture (Thanksgiving)		
14	Dec. 3	Relativity II	KK 13.1-13.6	F4, F5
	Dec. 5	Relativity III	KK 14.1-14.6	
15	Dec. 9- 13	Reading/Review/Recitation Week		
	<b>Dec. 17</b>	<b>Final Exam: 3:00 PM - 6:00 PM</b>	Cumulative	

#### Notes:

- **Midterm 1:** Thursday, Oct. 10, in class
- **Midterm 2:** Wednesday, Nov. 13, time and location TBD
- **Final Exam:** Tuesday, Dec. 17, 3:00 PM - 6:00 PM, location TBD

This is the overall plan at the beginning of the semester. It will **almost certainly change** as the

semester progresses. So, frequently check bcourses for any updates.