

❖ **PHYS_0174: Physics for Science and Engineering 1**

Instructor : Jeungphill Hanne

<Education>

- **PhD, Physics**, University of California-Los Angeles, USA
→ **Majoring in Experimental Biophysics** (*Dr. Giovanni Zocchi*)
- **PhD Study, Physics**, University of Florida (UF), USA
→ Majoring in Theoretical Elementary Particle physics
- **MS, Physics**, University of California-Riverside, USA
- **BS, Physics**, Inha University, South Korea



<Professional Experiences>

- Aug. 2019 ~ present: Professor in Physics & Electrical Engineering
Sichuan University Pittsburg Institute (SCUPI)
→ **Teach & Research (Optics/Optical engineering-applied : Biomedical, or Optical display)**
- Jul. 2010~ Aug. 2019: **Postdoctoral Research Associate**,
The Ohio State University Wexner Medical Center, (*Adviser: Dr. Richard Fishel*)
→ **Studying DNA Mismatch Repair by Experimental Biophysics**
- Sept. 2006~ Apr. 2010 : **Senior Research Scientist**, LG Display Co, Ltd., South Korea
→ **Optical Physics/Engineering**

→ **So, you can come to me anytime, and can ask any advice, or question for the future Career, and so on...., Very happy to share my experience, but the choice is yours !!**

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❖ **Agenda for today**

1. SCUPI 2023 spring Academic Calendar

- Academic Calendar : Midterms & Final etc.
- My Schedule : Office hours etc.

2. Course Introduction

- Course information
 - Subject, Text book, Lecture Hour, Office hour, Course website, etc.
- Course Objective & Scope
- Course Grading & Tentative Course Schedule

3. Introduction of Physics

- What is physics and Why need Physics
- Scope of Physics & What is Classical Mechanics

1. SCUPI 2023 spring Academic Calendar

- Academic Calendar : Midterms & Final etc.

SCUPI Academic Calendar for 2023-2024 Spring

	Feb.	Mar.				Apr.				May				Jun.				Jul.				Aug.					
Monday	20	27	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21
Tuesday	21	28	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22
Wednesday	22	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
Thursday	23	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24
Friday	24	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25
Saturday	25	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26
Sunday	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27
SCU Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
SCU Term	2023 Spring Teaching Weeks																				Summer Recess						

1st Midterm

2nd Midterm

Final

This schedule is preliminary!!

1. SCUPI 2023 spring Academic Calendar

- My Schedule : Office hours etc.

2022-2023 Fall Semester Course Schedule					
Class time	Monday	Tuesday	Wednesday	Thursday	Friday
08:15-09:00					
09:10-09:55					
10:15-11:00					Physics 1 03 3-104
11:10-11:55					Physics 2 03 3-104
Lunch Break					
13:50-14:35	Physics 1 02 3-104	Physics 1 03 3-104	Physics 1 04 3-103		
14:45-15:30	Physics 2 02 3-104	Physics 2 03 3-104	Physics 2 04 3-103		
15:40-16:25	Office Hour Physics 1 02	Office Hour Physics 1 04			
16:45-17:30	Physics 1 04 3-103	Office Hour Physics 1 03		Physics 1 02 3-104	
17:40-18:25	Physics 2 04 3-103			Physics 2 02 3-104	

But, you can come to my office anytime when I am in my office ^^

2. Course Introduction

• Course information

• Physics for Science and Engineering 1

- Learn the basics of General Physics 1 :
Newtonian Mechanics and Gravity
→ Fundamental to Engineering Research

• Text Book

- Principle of Physics by David Halliday ,
Robert Resnick & Jearl Walker,
10th edition.:ISBN-13: 978-1118230749s

• Lecture

- Instructor : Jeungphill Hanne, PhD
jeungphill.hanne@scupi.cn
- Time : Please refer to the calendar shown previously
- Office Hour : Mon(15:40-16:25)/ Tue. (15:40-17:30)
- Office : 3-321A @ Zone 3

• TA (3TAs):

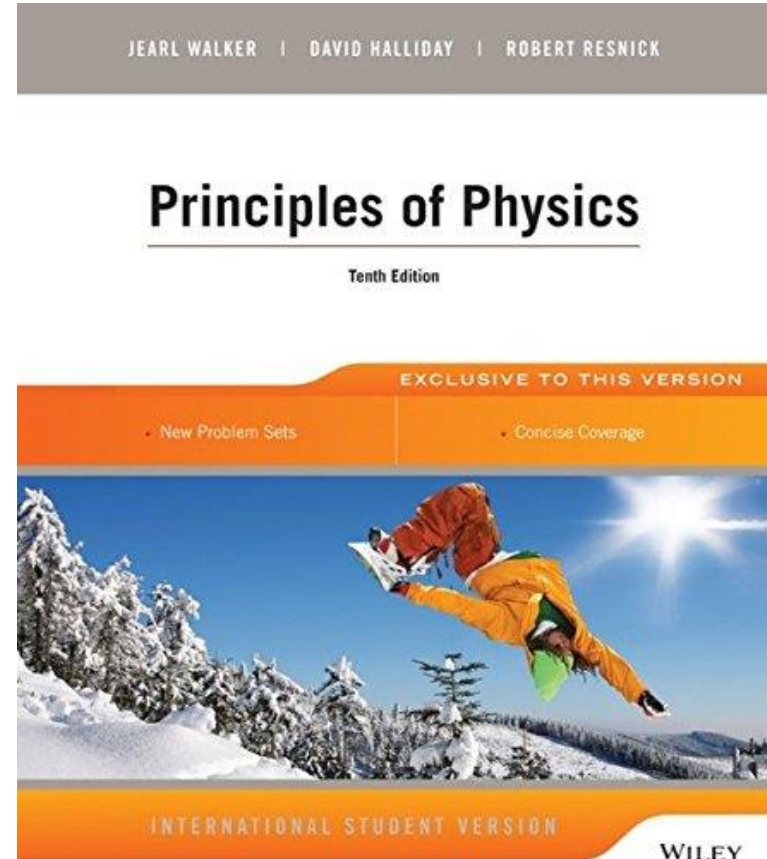
- Office Hrs : To be announced.

• Course Format

- Lecture, and Active Participation (i.e. Quiz, Presentation, Answers in the class etc.)

• Course Grading

- Two Midterms, Final, Homework, Quiz, Attitude (ex. Attendance, Engagement, Punctuality for HW, etc.).



2. Course Introduction

• Course Scope & Objective

- Objective : Understanding the basics of “Classical Mechanics”, Learning new Physical, or mathematical properties/theorem and eventually How to derive them from Newton’s Laws
- Scope : Motion, Newton’s Three Laws, Gravitation, new Physical, or Mathematical properties (i.e. Work, Momentum, Kinetic/Potential Energy, Center of Mass) , Specific Motion (i.e. Rotation), Rigid Body Motion, Equilibrium, OSCILLATIONS and Waves, etc.
→ Required : **Some mathematical Background ! (Vector, Derivative, Integral)**

All theorem & concepts will be derived from Newton’s Laws , except Gravitation!

• Course Grading

- Grading Components : HW(15%), Quiz (5%), Midterm I (24%), Midterm II (24%), Final (25%)
Attitude (5% : Attendance, Engagement, Punctuality for HW, etc.). < 60% attendance might be F.

Tests are not accumulative and may include something taught in the class !

Policy is subjective to be changeable!

- Course Schedule of General Physics 1 : Phys 0174*Subjective to be Flexible!*

Week	Physics 1 (PHYS 0174)	Topics	Assignment
Week 1 (2/20-2/26)	Introduction & Chap 1	Syllabus & Measurement & Motion	
Week 2 (2/27-3/5)	Chap2 &Chap 3	Motion, Vectors	HW1
Week 3 (3/6-3/12)	Chap3 &Chap 4	Motion in Two and Three Dimensions	HW2
Week 4 (3/13-3/19)	Chap 4 &Chap 5	Force and Motion—I	HW3
Week 5 (3/20-3/26)	Chap 5 &Review		HW4
Week 6 (3/27-4/2)	Chap 6 & Mid Term 1	Force and Motion—II	
Week 7 (4/3-4/9)	Chap 6 &Chap 7	Kinetic Energy and Work	HW5
Week 8 (4/10-4/16)	Chap 7 & Chap 8	Potential Energy and Conservation of Energy	HW6
Week 9 (4/17-4/23)	Chap 8 & Chap 9	Center of Mass and Linear Momentum	HW7
Week 10 (4/24-4/30)	Chap 9 & Chap 10	Rotation	HW7
Week 11 (5/1-5/7)	Chap 10 & Review		HW8
Week 12 (5/8-5/14)	Chap11 & Mid Term 2	Rolling, Torque, and Angular Momentum	
Week 13 (5/15-5/21)	Chap11		HW9
Week 14 (5/22-5/28)	Chap 11 & Chap 12	Equilibrium and Elasticity	HW 10
Week 15 (5/29-6/4)	Chap 12 & Chap 13	Gravitation	HW11
Week 16 (6/5-6/11)	Chap 13& Chap 15	Oscillation	HW12
Week 17 (6/12-6/18)	Chap 15		HW13
Week 18 (6/19-6/25)	Chap 16	Wave I	HW14
Week 19 (1/6-1/12)	Chap 17& Final review	Wave II	HW15