



Nanchang University PHYS 203 Principles of General Physics I

Credit: 4

Contact Hours

This course is composed of 24 lecture sessions, 3 tutorial sessions and 9 office contact hours. Each lecture session takes 2 contact hours in length; each tutorial session takes 3 contact hours in length; There will be a Q-A review session(3 contact hours) and Final Exam (3 contact hours)at the end of this term. This course has 72 contact hours in total.

Course Description

The course aims to provide an introduction of physics to students majoring physics-related science subjects. Course topics: Basic principles of classical mechanics, thermal physics, sound, and waves. Calculus plays an important part in the course; a minimum grade of B- in a college level calculus course is required.

Required Textbook

General Physics, 2nd Edition, by Sternheim and Kane, ISBN-13: 9780471522782

Grading

- Class Attendance 10%
- Quizzes 10%
- Mid-term Exam 40%
- Final Exam 40%

A+ 96-100	A 90-95	A- 85-89
B+ 82-84	B 78-81	B- 75-77
C+ 71-74	C 66-70	C- 62-65
D 60-61	F < 60	

Course Schedule

The course has 24 class sessions in total. All sessions are 2 contact hours in length. At the end of this term, there will be a Q-A review session(3 contact hours) and Final Exam (3 contact hours).



Note: the course outline and required readings are subject to change.

- Class 1: Vector and Motions
- Class 2: Newton's Laws
- Class 3: Static Forces
- Class 4: Circular Motion
- Class 5: Energy, Power, and Momentum
- Class 6: Angular Momentum
- Class 7: Vibration
- Class 8: Temperature and Behavior of Gases
- Class 9: Thermodynamics
- Class 10: Thermal Properties
- Class 11: Mechanics of Fluids
- Class 12: Mid-term Exam
- Class 13: Electric Forces and Fields and Potentials
- Class 14: Direct Current
- Class 15: Magnetism and Induced Currents and Fields
- Class 16: Description of Wave Motion
- Class 17: Sound
- Class 18: Sound
- Class 19: Wave Properties of Light
- Class 20: Mirrors and Lenses
- Class 21: Mirrors and Lenses
- Class 22: Imaging Systems
- Class 23: Introduction to Modern Physics
- Class 24: Final Review

Laboratory Schedule

Room: 205

Time: 15:30 – 18:30 on MWF

The lab reports have three parts, the pre-lab (to be completed on-line before the lab commences), the data and calculations and the post-lab. The pre-Lab Assignment due when you enter the lab. You and your partner will work collaboratively on the data and post-lab sections and hand in one report for the two of you.

In order to do a good job in the experiments, it is essential that you come well prepared. Reading the experiment for the first time in lab will put you and your partner at a disadvantage and make it very difficult to complete the experiment on time.

If you have any technical questions on the pre-lab, data section or post-lab assignments, you are encouraged to ask the instructor.



Safety Guidelines

All laboratory safety protocols in CHEM 11 will be strictly enforced. Violation of any safety protocol may result in point deduction on the Procedures, Techniques and Safety section of your individual Evaluation Sheet, and/or dismissal from the laboratory. Safety has two aspects: prevention of accident and response to emergency. The golden rule is to use your common sense. Treat your classmates and chemicals in the laboratory with respect. Do not work in the laboratory alone or perform unauthorized experiments. Ask your instructor whenever you do not know how to perform a procedure. Notify your instructor immediately when there is an accident (including broken glassware, major chemical spill, and bodily injury).

Attending Policy

Regular and prompt attendance is required. Under ordinary circumstances, you may miss two times without penalty. Each absence over this number will lower your course grade by a third of a letter and missing more than five classes may lead to a failing grade in the course. Arriving late and/or leaving before the end of the class period are equivalent to absences.

Policy on "Late Withdrawals"

In accordance with university policy, appeals for late withdrawal will be approved ONLY in case of medical emergency and similar crises.

Academic Honesty

Nanchang University expects all students to do their own work. Instructors will fail assignments that show evidence of plagiarism or other forms of cheating, and will also report the student's name to the University administration. A student reported to the University for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

General Expectations:

Students are expected to:

- Attend all classes and be responsible for all materials covered in class and otherwise assigned;
- Complete the day's required reading and assignments before class;
- Review the previous day's notes before class and make notes about questions you have about the previous class or the day's reading;
- Participate in class discussions and complete required written work on time;
- Refrain from texting, phoning or engaging in computer activities unrelated to class during the class period;
- While class participation is welcome, even required, you are expected to refrain from private conversations during the class period.



Special Needs or Assistance

Please contact the Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material. Our goal is to help you learn, not to penalize you for issues which mask your learning.