

Course outline for Physics 105: Modern Physics II

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I. COURSE INFORMATION

Description: Introduction to the physics of x-rays, molecules, lasers, condensed matter, nuclei, and fundamental particles.

References: Harris 2th (2nd).

Prerequisite: Physics 104.

Credits: 3.0

Section: WFU (WF 10:00–11:30 AM).

Location: F207

Web: sand.nip.upd.edu.ph/physics105

II. CLASS POLICIES

Attendance: University Rules state that students that accumulate six or more absences may be given a failing grade (5.0) if they do not drop the course.

Quizzes: Quizzes will be given to check attendance.

Long Exams: There will be three long examinations of equal weights. These exams constitute 3/4 of the final grade. One make up exam replaces an exam missed due to an excused absence. Further missed

Raw score x	Point grade
$90\% \leq x \leq 100\%$	1.00
$85\% \leq x < 90\%$	1.25
$80\% \leq x < 85\%$	1.50
$75\% \leq x < 80\%$	1.75
$70\% \leq x < 75\%$	2.00
$65\% \leq x < 70\%$	2.25
$60\% \leq x < 65\%$	2.50
$55\% \leq x < 60\%$	2.75
$50\% \leq x < 55\%$	3.00
$45\% \leq x < 50\%$	4.00
$x < 45\%$	5.00

exams and unexcused missed exams will be given a grade of zero. Absences must be documented and justified as excused within one week of the student's return to class.

Problem Sets: Problem sets and quizzes make up the remaining 1/4 of the final grade. Late sets will not be given any credit. Solutions to all problem sets must be submitted: a grade of INC will be given if any problem set is not turned in.

Academic honesty: Any form of cheating in examinations or any act of dishonesty in relation to studies, such as plagiarism, shall be subject to disciplinary action.

III. LECTURE PLAN

First day of classes : F 11 Jan 2019.

0. Administrative. Classical and modern physics.
1. Hydrogen atom. Spin and atomic physics.
2. Statistical mechanics.
3. **First long exam:** F 15 Feb 2019.
4. Molecules and solids.
5. **Second long exam:** – W 10 Apr 2019.
6. **Dropping deadline:** – H 11 Apr 2019.
7. Nuclear physics.
8. Particle physics.
9. **Third long exam:** F 10 May 2019.

Last day of classes : T 14 May 2019.

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