

Physics 350 – Modern Physics I – Spring 2017

Instructor: Dr. Andrew B. Croll
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Office Hours: Friday 9:00 to 12:30

Aim: To learn how the interaction of matter and energy govern the behavior of the universe around us.

Description: Breakdown of classical physics, Bohr model, Schrodinger mechanics of simple systems, atomic structure, selected topics from nuclear and solid state physics.

Prerequisites: MATH 266, PHY 252

Class: Tu/Th 09:30 - 10:45 - NDSU South Engineering 120 (Participation is highly recommended but not required!)

Required Course Materials: (available at NDSU Bookstore)

- (1) Morrison, Modern Physics for Scientists and Engineers.
- (2) Scientific calculator.

Evaluation:

1 midterm exam	25%
1 final exam	35%
10 assignments	25%
1 Group Project	10%
Quizzes	5%

Grading:

85%	-100%	A,
70%	- 85%	B,
60%	- 70%	C,
50%	- 60%	D,
0%	- 50%	F.

Marking Scheme:

three point marking system

0	– nothing of any value is written down
1	– something useful has been written down
2	– the main idea of how to solve the problem appears
3	– mostly a correct answer (1 minor mistake permitted)

Make-up Policy: There shall be no make-up allowed for missed assignments or quizzes. If the midterm is missed and a student provides written documentation of a legitimate reason the final exam will be made worth double.

Assignments: Homework problem sets on current course material will be assigned in class. There will be a problem set for each chapter, which are required to be submitted at the time indicated on each problem set. **No late homework will be accepted.** You may work together on homework sets, but do not simply copy another's answers; this will not benefit you when it comes to the exams or your future.

Attendance: According to [NDSU Policy 333 \(http://www.ndsu.edu/fileadmin/policy/333.pdf\)](http://www.ndsu.edu/fileadmin/policy/333.pdf), attendance in classes is expected.

Service Members: Veterans and student service members with special circumstances or who are activated are encouraged to notify the instructor as soon as possible and are encouraged to provide Activation Orders.

Special Needs: Any students with disabilities or other special needs, who need special accommodations in this course, are invited to share these concerns or requests with the instructor and contact the [Disability Services Office](http://www.ndsu.edu/disabilityservices/) (<http://www.ndsu.edu/disabilityservices/>) as soon as possible.

Academic Honesty: The academic community is operated on the basis of honesty, integrity, and fair play. [NDSU Policy 335: Code of Academic Responsibility and Conduct](#) applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the [Office of Registration and Records](#). Informational resources about academic honesty for students and instructional staff members can be found at www.ndsu.edu/academic honesty.

Tentative Schedule:

10 – Jan.	30 – Mar.	(A7 due)
12 – Jan.	4 – Apr.	
17 – Jan. (A1 due)	6 – Apr.	
19 – Jan.	11 – Apr.	(A9 due)
24 – Jan.	13 – Apr.	
26 – Jan. (A2 due)	18 – Apr.	
31 – Jan.	20 – Apr.	(A10 due)
2 – Feb.	25 – Apr.	
7 – Feb. (A3 due)	27 – Apr.	
9 – Feb.	2 – May	
14 – Feb.	4 – May	(A11 due)
16 – Feb. (A4 due)		
21 – Feb.		
23 – Feb.		
28 – Feb. (Adhesion Society Meeting)	9 – May	1:00 pm! Final Exam!
2 – Mar. (A5 due)		
7 – Mar. Midterm		
9 – Mar.		
14 – Mar. March Break (APS March Meeting)		
16 – Mar. March Break (APS March Meeting)		
21 – Mar. (A6 due)		
23 – Mar.		
28 – Mar.		