

2015

Physics 142 Electricity and Magnetism Summer 2015

Omar Adawi

Parkland College, oadawi@parkland.edu

Recommended Citation

Adawi, Omar, "Physics 142 Electricity and Magnetism Summer 2015" (2015). *Physics Courses*. Paper 28.
http://spark.parkland.edu/physics_course/28

Open access to this Course Materials is brought to you by Parkland College's institutional repository, [SPARK: Scholarship at Parkland](#). For more information, please contact spark@parkland.edu.

PHY 142 Information Sheet

PHY 142-201 Electricity and Magnetism

Instructor: Omar Adawi

Office and Telephone Number: D120, 373-3863

E-mail: oadawi@parkland.edu

Office Hours: Tuesday 2:00-3:00 p.m.
Thursday 2:00-3:00 p.m.
By Appointment

Textbook: Fundamentals of Physics. Tenth Edition, by David Halliday, Robert Resnick, and Jearl Walker.

PHY 142 is the second semester in the engineering physics sequence. Topics covered will include (from course description in the Parkland College Catalog):

“Heat, thermodynamics, electrical fields, potential, resistance, capacitance, and inductance; RC, RL, RLC circuits, and Maxwell’s equations.”

Performance Papers:

Hour Exams (4, 100 pts. each)	- 400 pts.
Quizzes and/or Homework	- 120 pts.
Labs	- 80 pts.
Final Exam (3:00-5:00 p.m., Thursday, August 6)	- 150 pts.

Grading: All scores will be totaled and your grade will be determined by the following scale:

A	90- 100%
B	80- 89%
C	70- 79%
D	60- 69%
F	Below 60%

Note: A minimum score of 60% on the laboratory part of the course is required to receive a passing grade for the course. All students will be required to show the instructor positive identification for the first examination.

Makeup Policy: **NO MAKEUP QUIZ** will be given when a quiz is missed and **NO LATE QUIZZES, HOMEWORK or LABS will be accepted.** If I am notified **BEFORE** an exam is missed and if the student contacts me upon their **IMMEDIATE RETURN** to the campus, then and only then will the student **POSSIBLY** be eligible for makeup.

Attendance Policy:

The attendance policy in this course is in keeping with the policy stated in the Parkland College Catalog. It says: "Regular and prompt attendance is expected at all classes," except in cases involving illness or emergency which should be brought to the attention of the instructor. "Regular attendance and consistent study habits are considered necessary for academic success in college. Faculty members have the prerogative of lowering grades for excessive absence."

Students are responsible for attending class regularly. A student who misses six hours of class, that are not due to a Parkland related activity, will have their overall average grade lowered by two percentage points for each hour missed (beginning with the sixth hour).

It is common courtesy to notify your instructor in the event that you will be unable to attend class. Please call me at my office **373-3863** or at the Center for Academic Success (**351-2441**). At either location you may leave a recorded message.

Our mutual goal is your success in this course. Inadequate attendance has always been a leading cause of failure in PHY 142.

Academic Honesty:

Unethical conduct during examinations or in preparation of assignments designated by the instructor will not be tolerated and may result in disciplinary action. This includes the use of non-executable "note" programs on graphics calculators during examinations or quizzes.

ADA Statement:

If you feel you have a disability for which you may need an academic accommodation (e.g. an alternative testing environment, use of assistive technology, or other classroom assistance) please inform the instructor as soon as possible and/or contact:

Cathy Robinson
Director, Office of Disability Services
U 260, 353-2082
crobinson@parkland.edu

Laboratory:

You must be present and participating during the lab in order to receive credit for the lab report that you hand in. It is your responsibility to record the names of all your lab partners. Reports will not be graded if a complete list is not included. Data that you include must be legitimate data collected during the lab session.

Keep lab groups at 4 persons or under. If other lab stations are available, your group may be asked to split up if your group exceeds four.

Lab #1: Equipotential Surfaces
Lab #2: Resistivity
Lab #3: Resistance-Capacitance
Lab #4: Series and Parallel Circuits
Lab #5: Specific Charge

- Lab #6: RC Circuits
- Lab #7: RL Circuits
- Lab #8: Specific Heat
- Lab #9: Heat of Fusion of Ice

A typical lab write-up should include the following:

- 1. Data:** An orderly display of the measurements that you took in the lab (tables are very helpful). Be sure to include units and significant figures on all your numbers.
- 2. Analysis:** Include graphs and calculations using your data. If the lab asks for a comparison, calculate a percent difference.
- 3. Conclusion:** A paragraph that describes the success/failure of the experiment. Comment on any errors and discuss possible sources of error.

Student Email Account: Students should access their Parkland email account at <http://stu.parkland.edu> at least weekly to obtain information about courses or college announcements. Students can go to the Tech Service Desk, A184, for help with their student email account, COBRA, my.parkland, and WiFi access from 7:30 AM – 6:00 PM, Monday – Thursday; or by telephone, 217-353-3333, or via email at TechHelp@parkland.edu .

Important Dates:

<u>Monday, August 03</u>	Last day to withdraw with W grade from full summer session courses
<u>Wednesday, August 05</u>	Last day of classes
<u>Thursday, August 06</u>	Final Examinations

Center for Academic Success: Room D120. Schedule will be posted. The telephone number is 351-2441.

***Note: Not all possible situations can be covered by one policy. If you believe that you have exceptional circumstances that merit waiver of any of these policies, please inform the instructor as soon as possible.**

Syllabus Addendum: Please visit this website to learn more about Parkland policies and resources.

https://cobra.parkland.edu/shared/shared%20content%20files/syllabus_addendum.html



PHY 142-201
Tentative Day by Day Course Outline

Date	Day	Section	Date	Day	Section
June 15	M	21.1-21.3, 22.1, 22.2, 22.3	July 13	M	30.3, 30.4, 30.6
June 16	T	22.1, 22.6, 22.7, 22.4, 23.1, 23.2	July 14	T	30.6, 30.7, 30.8, 30.9, 31.1
June 17	W	23.2, 23.6, 23.4, 23.5, 23.3, 24.1, 24.2	July 15	W	31.1, Lab #6
June 18	R	24.3, 24.7, 24.5, 24.2, 24.6	July 16	R	31.2, 31.3, Lab #7
June 22	M	24.8, 25.1, 25.2, 25.3, 25.5, 25.6	July 20	M	31.3, 31.4, 31.5, 31.6
June 23	T	25.4, 25.3, Lab #1	July 21	T	18.1-18.3, 19.1, 19.2
June 24	W	26.1, 26.2, Lab #2	July 22	W	19.3, 19.4, 19.6, 18.4
June 25	R	26.3, Review, Test #1	July 23	R	18.6, Review, Test #3
June 29	M	26.5, 27.1	July 27	M	18.5, 19.7, 18.5, 19.2
June 30	T	27.1, 27.2, 27.4, Lab #3	July 28	T	19.8, 19.9, 20.2
July 01	W	27.3, 28.1, Lab #4	July 29	W	20.3, Lab #8
July 02	R	NO CLASS	July 30	R	20.3, Lab #9
July 06	M	28.4, 28.2, 28.6, 28.7, 28.8	Aug 03	M	20.1, 20.4, 32.5
July 07	T	29.1, 29.2, Lab #5	Aug 04	T	32.5, Review, Test #4
July 08	W	29.3, 29.4, 30.1	Aug 05	W	32.3 Review
July 09	R	30.2, Review, Test #2	Aug 06	R	Final Exam