

Villanova University
Department of Physics

Physics 4301
Advance Lab.

F. Zamani & J. Carlo
Fall 2012

Text: Download from the web site:
<http://www.ortec-online.com/Library/an34.aspx>

Laboratory Reports: Laboratory reports should be submitted one week after the corresponding experiments. Each student should submit an individual laboratory report. More details will be provided in the first session.

Laboratory Attendance: Laboratory attendance during the regularly scheduled laboratory period is *absolutely essential*. Makeups will be arranged *if and only if* it is not possible to attend the laboratory due to sickness or an emergency, which should be documented.

Grading: Grades will be based on the lab. performance and lab. reports.

Contact Information for F. Zamani:

Office: Mendel 262B

Office Hours: MW: 11:00-12:00, 1:30-2:30. Other times by appointment.

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Phone: 610-519-4888

Contact Information for J. Carlo:

Will be provided by Dr. Carlo.

Experiments

F. Zamani: Weeks 1-8; 8/30/2012 - 10/25/2012: The following materials will be covered:

Basic identification in electronic measurement systems.

Geiger counting.

Alpha-spectroscopy with surface-barrier detectors.

Energy loss of charged particles (Alphas).

Rutherford experiment.

J. Carlo: Weeks 9-12; 11/01/2012 - 11/29/2012: Dr. Carlo will provide the details.

Make up: 12/06/2012