

Physics 201H

Fall Term 2007

2:30 – 3:20 on Fridays
202 Brace Hall

Instructors: Undergraduate Committee of the Department of Physics and Astronomy
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Overview: This one-credit seminar course is designed to introduce students to exciting topics in physics and to acquaint students with the research and professors in the Department of Physics and Astronomy.

Course requirements for students:

1. Attendance is required and counts toward the semester grade as shown in the table below.
2. During the 2nd and 3rd meetings of the course, Prof. Steve Ducharme will lead students through a hands-on experiment using light-emitting diodes. Students will write a report on the measurements you make and submit a report as instructed by Prof. Ducharme. The report is due at the beginning of the 5th meeting of the course, Friday, September 28.
3. Students will write two additional 3-4 page papers which summarize two of the presentations in the course (excluding Prof. Ducharme's presentations). Students can choose which two presentations to summarize. We recommend that you visit with each of the presenters if you need clarification on what was presented and to ensure the accuracy of your reports. Both of these reports are due at the beginning of the last meeting of the course, Friday, December 14.

Course Grading:

Course grades will be determined according to the following weighting:

10%	Attendance
30%	Report on experiments led by Prof. Ducharme
30%	Presentation report #1
30%	Presentation report #2

Students with Disabilities:

Students with disabilities are encouraged to contact one of the instructors for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

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(continued)

The following table lists the course meeting dates, tentative presenters, and topics. A more complete table will be provided as the schedule is filled in. "TBA" means "To be announced".

Course Meeting Date	Presenter	Topic
August 31	Cliff Bettis	Radiation is Your Friend
September 7	Steve Ducharme	Photons, Planck's Constant, LEDs I
September 14	Steve Ducharme	Photons, Planck's Constant, LEDs II
September 21	Dave Sellmyer	Nanoscale and Superscale Magnetism
September 28	Aaron Dominguez	Experimental High Energy Physics Experiment report due
October 5	Ilya Fabrikant	Electron Interference Induced by Photoeffect
October 12	Bob Hilborn	Adventures in Biophysics
October 19	Axel Enders	Scanning Tunneling Microscopy: Our Eyes and Hands into the Nanoworld
October 26	Sudeep Banerjee	Extreme Light and its Applications
November 2	Phil Plait	TBA
November 9	Christian Binek	Magnetic Thin Film: From Basic Research to Spintronics
November 16	Herman Betelaan	Coherent Electron Control
November 23	No class, Thanksgiving Break	
November 30	Gregory Snow	Messengers from Outer Space
December 7	Tim Gay	Laboratory Astrophysics: An Unpleasant Example
December 14	TBA	TBA Two presentation reports due