Physics of Lasers and Modern Optics

http://physics.unl.edu/~ducharme/PHYS343/343Home.html

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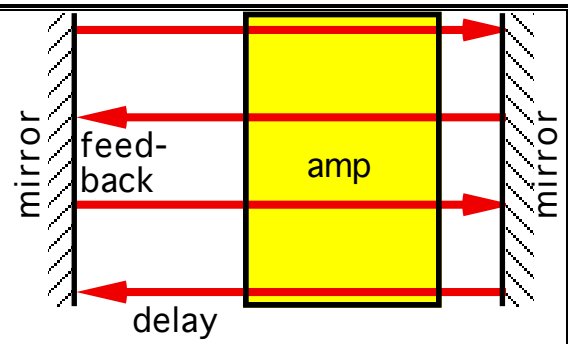
Popular Demand



Physics

343

Build a laser, 'catch' a photon, change the color of light;
Explore coherence, miniature lasers, a device to see in the night.
'Instant' holograms, fiber optics, laptop computer displays;
CD players, remote controls, use lasers in multiple ways.

Earn university credit for playing with photons

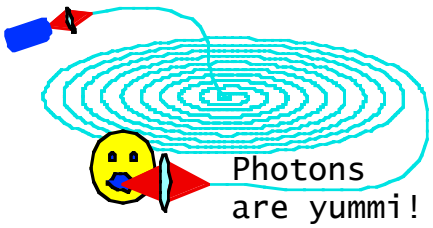
Who: Students of physics, astronomy, biology, chemistry, computer science, electrical engineering, geology, mathematics, mechanical engineering, meteorology–all science and engineering majors. Prerequisites: Physics 142 or 212, plus a laboratory course in Science or Engineering, or instructor permission.

What: An introduction to the physical principles and techniques of lasers and modern optics through hands-on laboratory exploration. *Required experiments:* laser safety, fundamentals of laser operation, optical detector physics. *Choose four from:* geometrical optics, polarization, Gaussian beams, coherence, diffraction, diode lasers, interferometry, holography, fiber optics, interference, spectrometers, atomic spectroscopy, nonlinear optics, liquid crystals.

When: Spring Semester 2014.
Times and Days To Be Arranged.

Where: Jorgensen Hall 233

How: 3 credit hours: 1 hr. Lecture and
3 hr. laboratory each week.



Further details are available from: **Stephen Ducharme, sducharme1@unl.edu, 472-8590**

Enrollment is limited-register soon!