Physics

PHYS 402  Light  credit: 3 OR 4 hours.

(PHYCS 371) Wave kinematics; geometrical optics: basic concepts, ray-tracing and matrix formalism, Gaussian imaging by thick lenses, stops, and apertures, and intensity relations; interference; interference spectroscopy and coherence; diffraction: Fresnel-Kirchhoff formulation, Fraunhofer case, Fresnel case, and holography; polarized light. Lectures, laboratory, and problems. 4 undergraduate hours. 3 or 4 graduate hours (3 hours without lab). Prerequisite: PHYS 102 (includes PHYS 101) or PHYS 214 (includes PHYS 211 and PHYS 212); MATH 385 or equivalent; or consent of instructor.

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<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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<td>32781</td>
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<td>A</td>
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<td>T</td>
<td>6106 - Engineering Sciences Building</td>
<td>Tunguz, B</td>
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<td>MW</td>
<td>136 - Loomis Laboratory</td>
<td>Flynn, C</td>
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Credit Hours: 4 hours

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<td>Flynn, C</td>
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Credit Hours: 3 hours
Restricted to Graduate - Urbana-Champaign.