

E1A Optics

[http://www.physics.gla.ac.uk/
e1a/optics_lecture/](http://www.physics.gla.ac.uk/e1a/optics_lecture/)

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Literature

Harris Benson, *University Physics*, chapters 35-38

Overview

ray optics

- mirrors, lenses,
- optical instruments, ...
- 7 lectures**

wave optics

- interference, diffraction,
- slits, gratings, ...
- 5 lectures**

classical optics

quantum optics

- quantum cryptography,
- quantum non-locality (EPR paradox), ...

1. Ray optics

□□(geometrical optics)

Benson, chapters 35 and 36

1.1 Reflection

Benson 35.2

