







- Eyes and modern cameras use a lens system to gather sufficient light while keeping the image in focus.
- A large opening is covered with a lens that focuses light from nearby object locations down to nearby locations in the image plane.
- However, lens systems DEPTH OF FIELD have a limited depth of field: they can focus light only from points that lie within a range FOCAL PLANE of depths (centered around a focal plane).
- Objects outside this range will be out of focus in the image.
- To move the focal plane, the lens in the eye can change shape (Figure 24.3); in a camera, the lenses move back and forth.

