## Physical Light

**The Nature of Light**
- real light
- mechanical and electronic control
- optics

**Terminology**
- light fixtures (spotlights, fresnels...)
- field or field diameter (the actual beam of light (100%))
- field angle (1/10 peak angle (10% max. intensity))
- beam angle (90% of brightness of beam)
- optical axis (50% of brightness of beam)
- throw (distance) (along center of beam of light)
- view to scene from fixture (look at point)
- hotspot and dropoff (concentration of light output)
- luminous (cd) in a specific direction (intensity (I))
- selective visibility

**Handling Light**
- fixture placement and adjustment
- lighting hardware in an actual space
- barn doors
- shutters
- dark spots
- full (volume) shadow
- broad compositions

**Integrating the Design**
- models
- scene painting
- constructing sets
- lighting scenery

**Orchestrating the Design**
- movement and cues
- POVs: lighting for a stage

**The Team and the Process**
- designers, electricians, programmers
- collaboration and compromise
- the audience
- technical/dress rehearsals, opening

## Digital Light

**The Nature of Light**
- faked light
- digital manipulation
- decay regions

**Terminology**
- light types (spot, ambient, directional...)
- cone angle
- penumbra

**Handling Light**
- show manipulator
- lighting software in a virtual space
- look through selected
- negative intensity
- mapping shadows
- umbra
- camera views

**Integrating the Design**
- modeling
- shaders (colors and textures)
- building polygons, primitives, and NURBS
- scenery lighting

**Orchestrating the Design**
- sequencing
- framing the view
- POVs: lighting for a screen

**The Team and the Process**
- artists and technicians
- collaboration and compromise
- the client
- production deadlines, release dates