**Basic Design Principles of Lighting Luminaire**

**2016-2017 / Fall**

**CONTENTS**

**Department:** Industrial Product Design

**Teacher:** Prof.Dr.Sermin ONAYGİL

1. **Week:** Introduction, contents of the lecture
2. **Week:** Light and lighting, the importance of lighting technics
3. **Week:** Photometric quantities and units, optical laws
4. **Week:** Eye, vision and perception
5. **Week:** Light and radiation, light production
6. **Week:** Light and colours, light propagation
7. **Week:** Light sources – conventional lamps and gears
8. **Week:** Vacation
9. **Week:** LED technology
10. **Week:** Luminaires – general characteristics - photometry
11. **Week:** Luminaires – optics – optic and thermal designs
12. **Week:** Simple lighting calculations and planning
13. **Week:** Application – designing a luminaire
14. **Week:** Presentations
15. **Week:** Presentations

**Review criteria for success:**

* continuity → 5 %
* homework presentation → 20 %
* homework file → 35 %
* final examination → 40 %

**lecture web page:**

http://atlas.cc.itu.edu.tr/~onaygil/