**Syllabus for EEE-307 Optoelectronics-I**

**Recommended Sources:**

* Optoelectronics and Photonics, S. A Kasap, 1. Edition, 2001.
* Optoelectronics: An Introduction, John Wilson and John Hawkes, 3. Edition, 1998.
* Optoelektonik Teori ve Uygulamalar, Eldar Musa , 2008.
* Photonics, Bahaa E. A. Saleh , Malvin Carl Teich, 2007.

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| Week-1 | Introduction to Optoelectronics |
| Week-2 | Fundamentals of Optics |
| Week-3 | Wave Nature of Light |
| Week-4 | Light Propagation in the Free Space |
| Week-5 | Light Propagation in the Material |
| Week-6 | Polarization Optics |
| Week-7 | Reflection and Refraction |
| Week-8 | Reflection and Refraction-2 |
| Week-9 | Tutorial-1 |
| Week-10 | Tutorial-2 |
| Week-11 | Interference & Diffraction |
| Week-11 | Optical Resonators Interferometers |
| Week-13 | Radiometry and Photometry |
| Week-14 | Tutorial-3 |