**Syllabus for EEE-357 Optoelectronics-Lab**

**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.

|  |  |
| --- | --- |
| Week-1 | Introduction and Motivation |
| Week-2 | Exp-1: Light Emitting Diodes (LEDs) |
| Week-3 | Exp-2: Light Depended Resistors (LDRs) |
| Week-4 | Exp-3: Infrared Leds and Sensors |
| Week-5 | Exp-4: Optocouplers |
| Week-6 | Exp-5: Photodiodes and Phototransistors |
| Week-7 | Exp-6: Optical Communication-Optical Fiber Training Set |
| Week-8 | Exp-7: Optical Fiber Power Measurements |
| Week-9 | Exp-8: Optical Fiber Attenuation Measurements |
| Week-10 | Exp-9: Measurement of Bending Losses and Numerical Aperture |
| Week-11 | Optoelectronic Based Mini Project |
| Week-12 | Optoelectronic Based Mini Project |
| Week-13 | Optoelectronic Based Mini Project |