2018 Spring

1	Course code	IDC 202
2	Course Title	*Optics*
3	Credits	2
4	Course Coordinator & participating faculty	Arun Thalapillil* Sachin Jain
5	Nature of Course	L&T- Lectures & Tutorials
6	Pre requisites	
7	Objectives & Outcomes	This course provides an introduction to phenomena involving light and optical instruments.
8	Course contents	1. Modern day classical optics – an introduction 2. Interference 3. Diffraction 4. Polarization 5. Scattering of light 6. Introduction to lasers 7. Optical techniques and instrumentation 7.1. Introduction to optical imaging 7.2. Microscopes 7.3. Telescopes 7.4. Interferometry 7.5. Holography 7.6. Polarimetry 8. Optics in physics, chemistry, biology and engineering 9. Geometric Optics

9	Evaluation / assessment	a. End-sem examination- 30% b. Mid-sem examination- 30% c. Quiz – 20 % d. Assignment- 20%
10	Suggested readings	**Text books:** 1) Optics by Eugene Hecht; Addison-Wesley; 4 edition (2001) 2) Optical physics by Lipson, Lipson, and Lipson; Cambridge University Press; 4 edition (2010)