Tópicos com ópticas para presentaciones

1. Introduction to optical systems (point-to-point links, reconfigurable networks, line/client, switching techniques)  
2. Communications concepts (SNR, ISI, BER, PRBS, eye diagrams, link budget, data standards)  
3. Channel multiplexing techniques (time, wavelength, subcarrier, space, polarization)  
4. Fiber-based data-degrading effects (loss, chromatic dispersion, polarization-mode dispersion, polarization-dependent loss)  
5. Amplifiers (EDFA and Raman, gain flattening, gain transients)  
6. Nonlinear effects, dispersion management and fiber types  
7. Modulation formats, capacity and data constellations (OOK, PSK, QAM, OFDM)  
8. Direct and coherent detection schemes  
9. Mitigating data impairments: optical (tunable compensators) and electronic (DSP, FEC)  
10. Basics of lightwave system modeling