

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري لمادة : فيزياء الليزر

	Material Covered
Week	Syllabus
1	Introductory Concepts: - Laser gain
2	Fluorescence line shape & fluorescence line width
3	Mathematica expressions of fluorescence line width
4	- Laser gain curve & Natural broadening
5	Doppler broadening & Pressure Broadening
6	Loop Gain (without loss) - Loop gain (with loss)
7	calculating threshold gain
8	- Holl burning and active medium gain
9	Saturation gain in cw laser Gain and output power of cw laser
10	- Continues wave laser & Pulsed laser.
11	- Pulse shape out of a pulsed Ruby laser
12	-Laser radiation properties.
13	Radiometry and units of measuring EM radiation.
14	- Spatial distribution of the emitted radiation , Transfer EM mode of the laser radiation
Week 16	Final exam