



COURSE: OPTICAL NETWORKS TECHNOLOGIES		
MASTER: TELECOMMUNICATION ENGINEERING	YEAR: 2018-19	TERM: 1st

WEEKLY PLANNING								
WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		Special room for session (computer classroom, audio-visual classroom...)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS/LAB ¹		DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	(7 sept) Optical fiber technologies, advantages and disadvantages & principle of operation & Types	X			Previous reading. Answering questions about background.	1,6	
2	2	(14 sept) Connectors & passive devices (couplers, splitters, filters, MUX/DEMUX-2 channels, circulator) & Optical link (power budget and time balance)	x			Exercises	1,6	4
3	3	(21 septiembre-ANCA) Optical link exercises and study cases	x			Concepts analysis. Review reading and exercise portfolio	1,6	2
4	4	(28 sept-OFS-David) Active components: amplification, modulation & transceivers and case of study	x			Concepts analysis. Review reading and exercise portfolio	1,6	2
5	5	(5 oct) Multiplexing Technologies: Application to WDM networks	x			Concepts analysis Review reading and exercise portfolio	1,6	3

6	6	(19 oct-BlueSPACE Plenary) Photonics Integrated Circuits	x			Concepts analysis.	1,6	2
7	7	(26 oct Leganés EPS) Simulation and measuring techniques in optical networks		x	LAB	Manual reading. Report	1,6	2
8	8	(16 nov) Student work group questions/ defense	x			Public defense	1,6	3
9	9	(23 nov EPS Leganés) Simulation and measuring techniques in optical networks (Matlab)		x	computer	Manual reading. Report	1,6	3
10	10	(30 nov) Optical access networks technologies (J Montalvo)-4h	x			Test or report	1,6x2	3
11	11-12	(14 dec Leganés EPS) Simulation and measuring techniques in optical networks -4h (option to attend Thursday +2h)		x	computer	Report 13-14 dec VPI	1,6x2	11,6
13	13	(21 dec, to cover student presentation) Impact (Portfolio review) Optical switching: technologies (OADM, OXC..) and case of study/ student work group	x			Report Review reading and exercise portfolio Concepts analysis/Public defense	1,6	
14	14	(Any time students can ask specific hours: work group support)				Report Review reading and exercise portfolio		

Subtotal 1 **22,4** **34,7**

Total 1 (Hours of class plus student homework hours between weeks 1-7)	58
---	-----------

1-7		Tutorials, handing in, etc					10	
8		Assessment				Hands in: portfolio with exercises and reports Final exam: january	3	7

Subtotal 2 **3** **17**

Total 2 (Hours of class plus student homework hours at week 8)	20
---	-----------

TOTAL (Total 1 + Total 2)	78
----------------------------------	-----------