



SUBJECT NAME: Internet Architecture		
DEGREE IN: TELEMATICS / TELECOMMUNICATION TECHNOLOGIES/ MOBILE AND SPATIAL COMMUNICATION SYSTEMS / SOUND AND IMAGE	COURSE: 4	PERIOD: 2º

WEEKLY PLANNING									
WEEK	SESSI ON	CONTENT DESCRIPTION	GROUP		Room	Session with two teachers	WEEKLY STUDENT ASSIGNMENT		
			AGGR	DEAGGR			DESCRIPCIÓN	FACE-TO- FACE HOURS	TOTAL HOURS (max 7h per week)
1	1	Introduction to the course. Interdomain routing.		Opt.		NO	Do 'IPv4 review' practice with CORE emulation environment	2	4
2	2	Internet business model, pricing and relationships.		Opt.		NO	Do 'Quagga introduction' practice with CORE emulation environment. Read [BGP], pps. 1-26, (reference [BGP] = 'BGP', Iljitsch van Beijnum, O'Reilly) Study 'RIRs and resource assignment' material	2	4
3	3	Introduction to Python		Opt.		NO	Study python	2	3
4	4	Pandas		Opt.		NO	Read ch 4 [PTDS] ([PTDS]=Principles and Techniques of Data Science, Sam Lau, Joey Gonzalez, Deb Nolan. https://www.textbook.ds100.org/)	2	5
5	5	<u>Lab</u> : BGP route processing with pandas		Opt.	4.1B01/4.1B02 (7.0J02/7.0J03)	NO	Study pandas	2	4
6	6	<u>Lab</u> : Analyze connectivity with top-50 most popular web sites		Opt.	4.1B01/4.1B02 (7.0J02/7.0J03)	NO	Study pandas	2	4
7	7	CDNs. Public and private addresses.		Opt.		NO	Read pps 61-74 [BGP]	2	5
8	8	Address Market		Opt.		NO	Study CDN and 'cloud computing' material	2	4
9	9	Partial exam, BGP networks Private addressing. Tunnels		Opt.		NO	Prepare for exam	2	3
10	10	Private addressing, NATs		Opt.	4.1B01/4.1B02 (7.0J02/7.0J03)	NO	Study 'address market' material	2	3
11	11	Private addressing, NATs		Opt.		NO	Study 'problems with NAT' and 'CGNs' material	2	3
12	12	<u>Lab</u> : NAT configuration		Opt.	4.1B01/4.1B02 (7.0J02/7.0J03)	SI	Knowledge elaboration from experience. Solve NAT exercises	2	5
13	13	Partial exam, IPv4 addressing IPv6 addressing		Opt.		NO	Read RFC 4291: 'IP Version 6 Addressing Architecture'	2	5

14	14	IPv6 addressing		Opt.		NO	Solve address assignment exercises	2	5
SUBTOTAL								28	+ 57 = 85
15- 18		Preparation for evaluation, evaluation						3	
TOTAL								88	