COURSE: Software Networks		
DEGREE: Telematics Engineering / Sound and Image Engineering / Telecommunications Technologies Engineering / Mobile and Space Communications Engineering	**YEAR: 3rd/4th**	**TERM: 2nd**

WEEKLY SCHEDULE OF THE COURSE

WEEK	SESSION	DESCRIPTION	GRUPS (mark with X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual classroom)	Indicate YES/NO if the session requires 2 teachers	WEEKLY WORK FOR STUDENT		
			LECTURES	SEMINARS			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h per week)
1	1	**Part I: Introduction** • Presentation and introduction of the course. • Introduction to Software Networks.	X			No	- Review the concepts of session 1. - Read the documents associated to session 2 (**).	1,66	3,5h
2	2	**Part II: Virtualization** • Introduction to virtualization. • Hypervisors. • Virtual machines. • Containers. • Hardware support to virtualization.	X			No	- Review the concepts of session 2. - Read the documents associated to session 3 (**).	1,66	3,5h
3	3	**Part III: Network Function**	X			No	- Review the concepts of session 3. - Read the documents associated to session 4	1,66	3,5h

		Virtualization ***Topic III.1: Introduction and motivation*** • Why Network Function Virtualization? • History of NFV and the role of ETSI NFV ISG.					(**).		
4	4	***Topic III.2: NFV architecture*** • Network services. • The NFV architecture.	X			No	- Review the concepts of session 4. - Read the documents associated to session 5 (**).	1,66	3,5h
5	5	***Topic III.3: Software architecture*** • NFV software architecture. • Descriptors in NFV.	X			No	- Review the concepts of session 5. - Read the documents associated to session 6 (**).	1,66	3,5h
6	6	**Part IV: Software defined networks** ***Topic IV.1: Introduction to SDN*** • Motivation and introduction to SDN.	X			No	- Review the concepts of session 6. - Read the documents associated to session 7 (**).	1,66	3,5h
7	7	***Topic IV.2: SDN architecture and OpenFlow basics*** • SDN architecture. • OpenFlow: basic concepts.	X			No	- Review the concepts of session 7. - Read the documents associated to session 8 (**).	1,66	3,5h
8	8	***Topic IV.3: OpenFlow and Integration with NFV*** • OpenFlow. • Integration with SDN.	X			No	- Review the concepts of session 8. - Prepare the lab session.	1,66	3,5h
9	9	**Part V: Lab exercises** • Lab exercise (I).		X	7.0.J02 or 7.0.J03 or 4.1.B01 or	Yes	- Continue preparing the lab session.	1,66	3,5h

					4.1.B02				
10	10	• Lab Exercise (II).		X	7.0.J02 or 7.0.J03 or 4.1.B01 or 4.1.B02	Yes	- Continue preparing the lab session.	1,66	3,5h
11	11	• Lab Exercise (III).		X	7.0.J02 or 7.0.J03 or 4.1.B01 or 4.1.B02	Yes	- Continue preparing the lab session.	1,66	3,5h
12	12	• Lab Exercise (IV).		X	7.0.J02 or 7.0.J03 or 4.1.B01 or 4.1.B02	Yes	- Continue preparing the lab session.	1,66	3,5h
13	13	• Lab Exercise (V).		X	7.0.J02 or 7.0.J03 or 4.1.B01 or 4.1.B02	Yes	- Prepare the deliverable associated to the lab exercise. - Prepare the evaluation.	1,66	3,5h
14	14	• Evaluation in the lab.		X	7.0.J02 or 7.0.J03 or 4.1.B01 or 4.1.B02	Yes		1,66	
						23,33	**49**	**23,33**	**49**
		Total 1 *(Hours of class plus student homework hours between weeks 1-14)*						72,33	
15		Extra sessions, tutorships, assignments delivery, etc.							

16 17 18		• Preparation of the evaluation and evaluation (only for non-continuous evaluation)						3	3,5
							Subtotal 2	**3**	**3,5**
						Total 2 *(Hours of class plus student homework hours between weeks 15-18)*		10	
TOTAL *(Total 1 + Total 2. Maximum 180 hours)*								**78,33**	

(*) The homework description refers to the work that the student has to do to prepare the session on the following week.

(**) The references are, depending on the session, slides with lecture notes, short articles or selected parts of the recommended books. Most of the provided material will be in English.

Note on evaluation: The continuous evaluation mark is composed of three parts:

- Lab results (based on milestones and/or short reports, there may be additional lab tests): 60%;
- And knowledge tests (during the sessions): 40%;