Universidad Carlos III de Madrid
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COURSE: Content Delivery Networks		
DEGREE: Master in Telematics Engineering	**YEAR: 2015-16**	**TERM: 2nd**

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	Indicate YES/NO If the session needs 2 teachers	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	Presentation and Introduction	X				In this session we present the course, introducing the basic topics of the course.	1,5	6,5
1	2	Overlay Networks – Introduction	X				In this lecture we present the basics of overlay networks, and the benefits and drawbacks to use this type of networks.	1,5	
2	3	Overlay Networks – Real networks	X				The student will study the main proposals about real overlay networks.	1,5	6,5
2	4	BitTorrent introduction and protocol	X				In this lecture we present the main concepts of the BitTorrent protocol.	1,5	
3	5	BitTorrent Peer and Piece selection algorithms	X				In this lecture we present the algorithms to select peers among all that are available as well as the algorithm to select the part of the file to be downloaded.	1,5	6,5
3	6	Publish/Subscribe systems – Introduction	X				Basic functionality of publish/subscribe systems.	1,5	
4	7	Publish/Subscribe systems - examples	X				Some of the most representative examples of publish/subscribe systems will be presented in this lecture.	1,5	6,5
4	8	P2P streaming – live and VoD	X				In this lecture we will present and overview of the most used P2P techniques used to	1,5	

							stream video.		
5	9	Information-Centric Networking - Introduction	X				We will present the main characteristics of this new network paradigm.	1,5	6,5
5	10	Information-Centric Networking – CCN	X				Content-Centric Networking is, nowadays, the most popular proposal under the umbrella of ICN and we will study it in this lecture.	1,5	
6	11	Multimedia Communications in ICN	X				We will present the particular proposals to retrieve multimedia traffic using ICN concepts.	1,5	6,5
6	12	Content-Delivery Networks - Introduction	X				The main concepts of a CDN are introduced.	1,5	
7	13	Content-Delivery – Real examples	X				A real case, like Akamai, is presented in this lecture.	1,5	6,5
7	14	Test	X				Students have to take a test to evaluate their knowledge on these topics.	1,5	
							Subtotal 1	**21**	**45,5**
							Total 1 *(Hours of class plus student homework hours between weeks 1-7)*	66,5	

8		Tutorials, handing in, etc							
9		Assessment						3	6,5
10									
11									
							Subtotal 2	**3**	**6,5**
							Total 2 *(Hours of class plus student homework hours between weeks 8-11)*	9,5	

TOTAL *(Total 1 + Total 2. Maximum 90 hours)*	**76**