Universidad Carlos III de Madrid

SUBJECT: LIFE CONTINGENCIES		
MASTER DEGREE: ACTUARIAL SCIENCE	ECTS: 6.0	QUARTER: 1

TIMETABLE FOR THE SUBJECT

WEEK	SESSION	DESCRIPTION OF EACH SESSION	GROUP (X mark)		Indicate if a different lecture room is needed (computer, audiovisual, etc.)	HOMEWORK PER WEEK		
			1	2		DESCRIPTION	ATTENDING HOURS	HOMEWORK Max. 7H/WEEK
1	1	Assurances: cash-flow signature and valuation I	x			Design of examples of assurance contracts	3	6
2	1	Assurances: cash-flow signature and valuation II	x			Design of examples of assurance contracts	3	6
3	1	Annuities: cash-flow signature and valuation I	x			Design of examples of annuity contracts	3	6
4	1	Annuities: cash-flow signature and valuation II	x			Design of examples of annuity contracts	3	6
5	1	Efficient moments calculation using mortality tables	x			Examples of efficient expansions	3	6

6	1	The Central limit Theorem and life insurance business quantitative foundations	x			Discount value probability distributions for various portfolios	3	6
7	1	Models with expenses. Premium calculation.	x			Examples of with-expenses premium calculation	3	6
8	1	Future net liabilities and reserves.	x			Examples of reserves estimations for various contracts	3	6
9	1	Multiple contingencies models. Introduction and basic contracts	x			Valuation of premiums and reserves of disability contracts	3	6
10	1	Working compensation schemes(wcs)	x			Design and premiums and reserves calculations of WCS	3	6
11	1	Widowhood contracts(wc)	x			Design and premiums and reserves calculations of WC		
12	1	Orphanage contracts and endowments	x			Design and premiums and reserves calculations		

13	1	VBA applications seminar	x			VBA calculation modules	3	7
14	1	Exam preparation seminar				Review of previous exams and types of questions	3	7
TOTAL HOURS								