



COURSE: MACHINE LEARNING FOR DATA MINING		
DEGREE: BUSINESS STATISTICS	YEAR: 4	TERM: 1

WEEKLY PLANNING								
WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		Special room for session (computer classroom, audio-visual classroom...)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	Introduction to Machine Learning	X			Study	1,5	4
1	2	Basic methods for classification and regression: knn, trees and rules	X			Study	1,5	
2	3	Basic methods for classification and regression: knn, trees and rules	X			Study	1,5	4
2	4	Introduction to the R language		X	COMPUTER ROOM	Practice with the tool	1,5	
3	5	Machine learning pipeline: model training, hyper-parameter tuning, model evaluation	X			Study	1,5	5
3	6	Exercises		X	COMPUTER ROOM	Exercises	1,5	
4	7	Introduction to the R Machine learning MLR		X	COMPUTER ROOM	Study	1,5	5
4	8	Exercises		X	COMPUTER	Exercises	1,5	

					ROOM			
5	9	Feature selection	X			Study	1,5	5
5	10	Exercises		X	COMPUTER ROOM	Exercises	1,5	
6	11	Advanced Machine Learning methods: bagging, boosting, stacking	X			Study	1,5	5
6	12	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
7	13	Advanced Machine Learning methods: bagging, boosting, stacking	X			Study	1,5	5
7	14	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
8	15	Preprocessing and transforming data: dplyr		X	COMPUTER ROOM	Study	1,5	5
8	16	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
9	17	Classifying with imbalanced samples and cost. ROC curves	X			Study	1,5	6
9	18	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
10	19	Exercises / assignments	X			Study	1,5	5
10	20	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
11	21	Introduction to Big Data methods: Hadoop and Spark	X			Study	1,5	5
11	22	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
12	23	Introduction to Big Data methods: Hadoop and Spark		X	COMPUTER ROOM	Estudio tema	1,5	5
12	24	Exercises / assignments		X	COMPUTER ROOM	Practice with tool	1,5	
13	25	Exercises / assignments	X			Study	1,5	5
13	26	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
14	27	Exercises / assignments	X			Study	1,5	5
14	28	Exercises / assignments		X	COMPUTER ROOM	Exercises	1,5	
Subtotal 1							42	68
Total 1 (Hours of class plus student homework hours between weeks 1-14)							110	
15		Tutorials, handing in, etc					10	

16								
17		Assessment					3	
18							27	
							Subtotal 2	3
							Total 2 (<i>Hours of class plus student homework hours between weeks 15-18</i>)	40
							TOTAL (<i>Total 1 + Total 2</i>)	150