ADS	Agenda (tentative)				
Week	Topic	Month	Monday	Thursday	Person in charge
1	Review of required previous knowledge: asymptotic notation, basic algorithm analysis, arrays, linked lists, stacks and queues, hashing, binary search trees, AVL trees, red-black trees, heaps.	February	10	13	Amalia Duch
2	Multidimensional data structures: associative retrieval and object representation: grid files, kd trees, point quad trees, PR quad trees, octrees.	February	17	20	Amalia Duch
3	Metric data structures, searching in metric spaces.	Frebruary	24	27	Amalia Duch
4	Geometric and kinetic data structures: interval, segment and partition trees, ray shooting	March	2	5	Amalia Duch
5	External memory/cache oblivious: models, B-trees, ordered file maintenance.	March	9	12	Amalia Duch
6	Hashing: universal hash functions, open addressing, cuckoo hashing, 2-choice hashing. Bloom filters.	March	16	19	Conrado Martínez
7	Review of amortized analysis. Potential method. Priority queues: binomial queues, Fibonacci heaps.	March	23	26	Conrado Martínez
8	Persistent & retroactive data structures. Partial persistence, full	March	30		Conrado Martínez
	persistence. Fat nodes, path copying. Ordered labelling &	April		16	Conrado Martínez
9	Self-adjusting data structures: List updates, Splay trees.	April	20	23	Salvador Roura
10	Randomized data structures: Randomized BST's, treaps, skip lists.	April	27	30	Salvador Roura
11	Introduction to Bioinformatics, Genomes, Data Repositories.	May	4		Xavier Messeguer
12	Efficient algorithms on pattern search (single pattern: Horspool, BNDM and Bom; generalisation: SetHorspol and Sbom).	May	11	14	Xavier Messeguer
13	Alignment of two sequences and generalization to several sequences.	May	18	21	Xavier Messeguer
14	Genome's comparisons: Generalized suffix trees.	May	25	28	Xavier Messeguer
15	Student's Presentations and final Works' delivery.	June		19	Amalia Duch