## **Schedule Databases 2019-2020**

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Week date	Topics	Clips	Exercises	Assignments	Book
6 tue Feb 4	Intro; Relational model		No session		1; 2.1-2.3
6 thu Feb 6	Relational algebra	RA1 RA2	Defining your data; Algebra		2; 7-7.1.1
7 tue Feb 11	ERD FD: concept	FD1	Session 1		4 - 4.6; 3 - 3.1
7 thu Feb 13	More FDs: lossless decomposition, BCNF	FD2	Identification; Lossless decompositions		3 - 3.3, not 3.2.8
8 tue Feb 18	SQL	SQL1.1 SQL1.2	Session 2		6 - 6.5; 7-7.2, <7.3>, 7.4
8 thu Feb 20	Further normalization: 3NF, DP	NORM1 NORM2	Queries		3.4 (with <3.4.2>), 3.5,
9 tue Feb 25	4NF, indexing		Session 3 Lab1		3.6 - 3.6.2, 3.6.4; 8.3
9 thu Feb 27	Constraints, triggers, view		Qualities of decompositions	Deadline group registration	7 - 7.5; 8; 10.1;
10 tue Mar 3	Break: no classes		Session 4 Lab 1		
10 thu Mar 5	Break: no classes		Lab assistance	Deadline lab 1: Friday March 6	
11 tue Mar 10	TP: concurrency	CC1 CC2	Session 5		18 - 18.3, 18.4.1, 18.4.2, <remainder of<br="">18.4&gt;,</remainder>
11 thu Mar 12	TP: recovery	REC1 REC2	Recovery		19.2.1, 19.2.2; 17, 1919.1.5;
12 tue Mar 17	2PC; Query processing (algebraic rewriting)		Session 6	12/3 Deadline HW2	20.5; 15.1, 15.1.3, 15.1.4, 15.3 - 15.3.4 15.4.6, <15.6.1 - 15.6.3>
12 thu Mar 19	Query processing (algorithms)		Query processing		<16.1>, 16.2, 16.3 (with<16.3.2>)
13 tue Mar 24	Guest lecture		Session 7 Lab 2	24/3 Deadline HW3	
13 thu Mar 26	Assorted topics				
14 tue Mar 31	Example examination				
14 thu Apr 2	spare				

<sup>-</sup> means "up to and including"; < > means "additional reading

## **Assorted topics**

Het oorspronkelijke plan was dat Yannis Velegrakis een gastcollege zou geven over diverse actuele onderwerpen. Omdat dit niet door kon gaan, heeft Yannis enkele links doorgegeven. Dit is geen tentamenstof, maar gericht aan de geïnteresseerden.

Information Integration: An Introduction

 $\frac{https://medium.com/cracking-the-data-science-interview/an-introduction-to-big-data-data-integration-40715baa7961}{(a)}$ 

Data Cleaning:

https://www.youtube.com/watch?v=GMxCL0PBHzA

RDF (Adding Semantics to your data)

https://www.europeandataportal.eu/sites/default/files/d2.1.2 training module 1.3 introduction to rdf sparql en edp.pdf

Big Data:

https://www.youtube.com/watch?v=bAyrObl7TYE

NoSQL Databases:

https://www.youtube.com/watch?v=uD3p\_rZPBUQ

https://www.youtube.com/watch?v=ql\_q07C\_Q5I&t=30s