Sesi Akademik *Academic Session*	2019/2020
Semester/Penggal *Semester/Term*	2
Kod Kursus *Course Code*	WQD7007
Tajuk Kursus *Course Title*	Pengurusan Data Besar *Big Data Management*
Bahasa Pengantar *Medium of Instruction*	Bahasa Inggeris *English*
Rujukan Utama *Main Reference*	1. Principles and Practice of Big Data: Preparing, Sharing, and Analyzing Complex Information, Jules J. Berman, 2018 2. Big Data NoSQL Architecting Mongo DB, Navin Sabharwal & Shakuntala Gupta Edward, 2014 3. Big Data Governance: Modern Data Management Principles for Hadoop, NoSQL & Big Data Analytics, Peter Ghavami, 2016. 4. Modern Big Data Processing with Hadoop, V Naresh Kumar & Prashant Shindgikar, 2018.
Strategi Pembelajaran *Learning Strategies*	Kuliah, tutorial dan makmal *Lecture, tutorial and lab*
Masa Pembelajaran Pelajar *Student Learning Time*	Bersemuka / *Face to face* : 42 Tidak Bersemuka / *Non Face to face*: 2 Masa Persediaan Pelajar / *Student Preparation Time*: 76
Kemahiran Boleh Pindah Transferable Skills	Penyelesaian masalah dengan menggunakan kaedah - kaedah statistik, kemahiran mengintepretasi keputusan, dan kemahiran analisis/logikal; *Problem solving using stastistical technique, result evaluation skills, and analysis/logical skills.*
Pensyarah / *Lecturer* Bilik / *Room* Telefon/e-mel *Telephone/e-mail*	Dr. Hoo Wai Lam A-3-2F wlhoo@um.edu.my
Sesi Kuliah / *Lecture Session:* Hari/Masa / *Day/Time* Tempat / *Venue*	 Selasa, 6pm-8pm / *Tuesday, 6pm-8pm* DK1, Blok B / *DK1, Block B*
Sesi Tutorial/Amali: *Tutorial/Practical Session:* Hari/Masa / *Day/Time* Tempat / *Venue*	 Selasa, 8pm-9pm / *Tuesday, 8pm-9pm* MM3, Blok B / *MM3, Block B*

Perincian Pemberatan Penilaian
Detail of Assessment Weightage
	Penilaian Berterusan / *Continuous Assessment* : 60%
	  - Tugasan / *Assignment* : 10%
	  - Ujian pertengahan / *Mid-term Test* : 15%
	  - Ujian Makmal / *Lab test* : 15%
	  - Projek / *Project* : 20%
	Peperiksaan Akhir / *Final Examination* : 40%

Jadual Pengajaran / *Teaching Schedule*

Minggu *Week*	Topik & Aktiviti *Topic & Activities*	Rujukan *References*
1 18 Feb 2020	Pengenalan kepada kursus: Data Besar dari kacamata Dunia Perniagaan & Dunia Sains *Introduction to the course:* *Big Data from Business and Science perspective* Tutorial 1 *Tutorial 1*	Bahan atas talian *Online material*
2 25 Feb 2020	Talian paip Data Besar dengan *Hadoop* *Big Data Pipeline using Hadoop* Makmal 1 *Lab 1*	Bahan atas talian *Online material*
3 03 Mac 2020	Konsep-konsep pangkalan data bagi data besar: Menyediakan struktur kepada data tidak berstruktur *Big data concepts: providing structure for unstructured data* Tutorial 2 *Tutorial 2*	Berman (2013) Bahan atas talian *Online material*
4 10 Mac 2020	Konsep-konsep pangkalan data bagi data besar: Pengenalpastian ontologi *Big data concepts: Identification and ontologies* Makmal 2 *Lab 2*	Berman (2013) Bahan atas talian *Online material*
5 17 Mac 2020	Teknologi penyimpanan Data Besar: Capaian data tradisional & pengurusan pangkalan data tradisional *Big data technologies: Traditional database management* Tutorial 3 *Tutorial 3*	Berman (2013) Bahan atas talian *Online material*
24 Mac 2020 31 Mac 2020 7 Apr 2020 14 Apr 2020 21 Apr 2020	Cuti pertengahan Semester *Semester Break*	
6 28 Apr 2020	Sistem Fail Terasing bagi Data Besar *Distributed computing for big data* Makmal 3 *Lab 3*	Bahan atas talian *Online material*

7 5 May 2020	Teknologi penyimpanan Data Besar: Pengenalan Kepada Pangkalan Data NoSQL (Bahagian 1) *Big data technologies: Introduction to NoSQL databases (Part 1)* Tutorial 4 *Tutorial 4*	Sabharwal and Edward (2014) Bahan atas talian *Online material*
8 12 May 2020	Teknologi penyimpanan Data Besar: Pengenalan Kepada Pangkalan Data NoSQL (Bahagian 2) *Big data technologies: Introduction to NoSQL databases (Part 2)* Makmal 4 *Lab 4*	Sabharwal and Edward (2014) Bahan atas talian *Online material*
9 19 May 2020	Ujian Pertengahan (atas talian, minggu 1-6) *Mid term test (online, week 1-6)* Teknologi penyimpanan Data Besar: pengaksesan data *Big data technologies: Data access* Tutorial 5 *Tutorial 5*	Bahan atas talian *Online material*
10 26 May 2020 (Hari raya)	Teknologi penyimpanan Data Besar: pengaksesan data *Big data technologies: Data access (Part 2)* Makmal 5 *Lab 5*	Bahan atas talian *Online material*
11 2 June 2020	Teknologi penyimpanan Data Besar: pengaksesan data *Big data technologies: Data access (Part 3)* Tutorial 6 *Tutorial 6*	Bahan atas talian *Online material*
12 9 June 2020	Ujian Makmal (atas talian) *Lab test (online)* Asal usul & Kepercayaan terhadap data *Data provenance and data trustworthiness* Makmal 6 *Lab 6*	Notes Bahan atas talian *Online material*
13 16 June 2020	Kajian kes *Case study* Tutorial 7 *Tutorial 7*	Bahan atas talian *Online material*
14 23 June 2020	Pembentangan Projek *Project presentation*	Laporan projek *Project report*