

# MANUAL PENGGUNA



Pusat Pengajaran  
Pembelajaran Universiti  
UNIVERSITY TEACHING AND LEARNING CENTRE  
Universiti Utara Malaysia

# SISTEM OBE UUM

VERSI 1.0



Pusat Pengajaran Pembelajaran  
Universiti (UTLC),  
Universiti Utara Malaysia.  
06010 UUM Sintok,  
Kedah, Malaysia



04-928 4697 / 04-928  
4698

**Disediakan Oleh:**  
**University Teaching and Learning Center, UUM**

## 1. Keperluan Dokumen

Bagi mengisi data ke dalam sistem OBE beberapa dokumen perlu disediakan terlebih dahulu. Dokumen ini mungkin berlainan mengikut setiap pusat pengajian namun boleh digunakan untuk memudahkan proses masuk data ke dalam sistem OBE.

Bagi manual pengguna ini, dokumen yang akan digunakan ialah:

- a. Syllabus\_DesignMQA\_V2.0\_PG - <http://utlc.uum.edu.my/index.php/obe-files/postgraduate> (password: uum2020)
- b. Syllabus\_DesignMQA\_V2.0\_UG - <http://utlc.uum.edu.my/index.php/obe-files/undergraduate> (password: uum2020)
- c. Syllabus\_OJMT6023 - <https://bit.ly/ManualOBE> (password: uum2020)
- d. Assessment Plan - <https://bit.ly/ManualOBE>

## 2. Menu Utama Sistem OBE

2.1 Capaian ke Sistem OBE UUM adalah melalui portal masing-masing.

### Academic>Outcome Based Education (OBE)

2.2 Berikut adalah menu utama sistem OBE UUM

- i. Bagi tujuan kemasukkan data *syllabus* dan *teaching plan* perlu Klik pada menu *Syllabus/Teaching Plan*

### 3. Menu Setup Syllabus

3.1 Pilih Semester (Untuk *Undergraduate* pilih semester A999, manakala untuk *Postgraduate* pilih semester G999)



The screenshot shows a 'LIST OF COURSES' interface. At the top, there's a 'Staff No. 2328' and a 'Log Out' button. Below that is a 'Semester' dropdown menu with options: 'A999 - (OBE)', 'A201 - 2020/2021', 'G999 - 2019/2020', and 'A192 - 2019/2020'. The 'A999 - (OBE)' option is highlighted with a red box. To the right of the dropdown is a table titled 'List of Course' with columns 'Code', 'Sesi', and 'Phase'. The table contains four rows: A999 (OBE), A201 (2020/2021), G999 (2019/2020), and A192 (2019/2020). The 'Phase' column shows '1 - First' for A999 and A201, and '2 - Second' for G999 and A192. Below the table, a message says 'No data to display'. At the bottom right of the page are buttons for 'Setup Syllabus', 'Setup Teaching Plan', 'Print Student Format', and 'Print MQA Format'.

3.2 Setelah memilih semester, akan keluar senarai kursus yang telah diberikan untuk di masukkan data (Font **Biru** bermaksud Approved manakala Font **Merah** masih Draf). Dalam contoh di bawah terdapat 2 kursus yang perlu di masukkan data



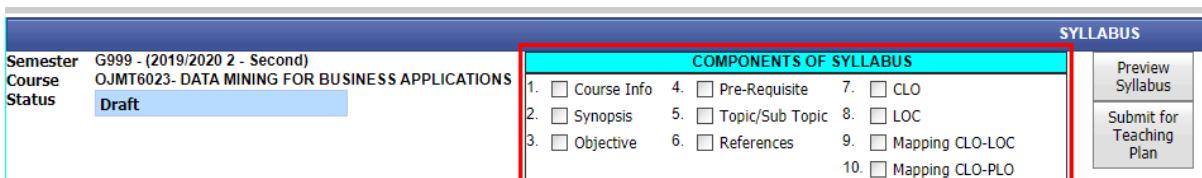
The screenshot shows the same 'List of Courses' interface as before, but now with two courses listed: 'OJMT6023 DATA MINING FOR BUSINESS APPLICATIONS' and 'OJMT6033 DATA VISUALIZATION FOR CONSUMER INSIGHT'. The 'Setup Syllabus' button for 'OJMT6023' is highlighted with a red box. The 'List of Course' table has columns 'No.', 'Course Code', 'Course Description', 'Setup Syllabus', 'Setup Teaching Plan', 'Print Student Format', and 'Print MQA Format'. The 'Setup Syllabus' column for OJMT6023 shows 'Setup Syllabus' (blue) and 'Syllabus Not Approved' (red). The other courses show 'Setup Syllabus' (blue) and 'Syllabus Not Approved' (red) in their respective columns.

3.3 Untuk masukkan data silibus pada kursus OJMT6023, Klik pada *Setup Syllabus*



The screenshot shows the same 'List of Courses' interface as before, but now with the 'Setup Syllabus' button for 'OJMT6023' highlighted with a red box. The 'List of Course' table has columns 'No.', 'Course Code', 'Course Description', 'Setup Syllabus', 'Setup Teaching Plan', 'Print Student Format', and 'Print MQA Format'. The 'Setup Syllabus' column for OJMT6023 shows 'Setup Syllabus' (blue) and 'Syllabus Not Approved' (red). The other courses show 'Setup Syllabus' (blue) and 'Syllabus Not Approved' (red) in their respective columns.

3.4 Terdapat 10 komponen yang perlu di isi seperti berikut



The screenshot shows a 'SYLLABUS' page for course 'OJMT6023 - DATA MINING FOR BUSINESS APPLICATIONS'. The 'Semester' is 'G999 - (2019/2020 2 - Second)' and the 'Status' is 'Draft'. On the right, there are buttons for 'Preview Syllabus' and 'Submit for Teaching Plan'. The main area is titled 'COMPONENTS OF SYLLABUS' and contains a list of 10 items, each with a checkbox:

- 1.  Course Info
- 2.  Synopsis
- 3.  Objective
- 4.  Pre-Requisite
- 5.  Topic/Sub Topic
- 6.  References
- 7.  CLO
- 8.  LOC
- 9.  Mapping CLO-LOC
- 10.  Mapping CLO-PLO

3.5 Course Info

- i. Data untuk Course Name, School Name, Collage Name dan Credit Hour akan wujud secara automatik di dalam sistem OBE (maklumat ini ditarik dari sistem ASIS/GAIS)
- ii. Coursework %: Pecahan markah untuk kerja kursus
- iii. Final %: Pecahan markah untuk peperiksaan akhir
- iv. Achievement Target (AT/QAT): Merupakan nilai yang digunakan bagi tujuan tanda aras kursus bagi tujuan Assurance of Learning (AOL). Pada kebiasaan nilai ini perlu dipersetujui di peringkat Program (Rujuk Penyelaras Program di Pusat Pengajian).
- v. Component: Perlu pilih samada Compulsory, Major (Core), Elective(Core), Elective(Open/Free)
- vi. Bagi bahagian MQA Information, maklumat ini boleh diperolehi dari maklumat silibus sedia ada. Transferable Skills merupakan skill yang akan di terapkan kepada pelajar berpandukan Learning Outcome Cluster (LOC).
- vii. Pastikan klik pada butang **SAVE** setelah selesai masukkan data.

Semester	G999 - (2019/2020 2 - Second)	COMPONENTS OF SYLLABUS			SYLLABUS
Course	OJMT6023- DATA MINING FOR BUSINESS APPLICATIONS	<input checked="" type="checkbox"/> Course Info	<input type="checkbox"/> Pre-Requisite	<input type="checkbox"/> CLO	<a href="#">Preview Syllabus</a>
Status	Draft	<input type="checkbox"/> Synopsis	<input type="checkbox"/> Topic/Sub Topic	<input type="checkbox"/> LOC	<a href="#">Submit for Teaching Plan</a>
		<input type="checkbox"/> Objective	<input type="checkbox"/> References	<input type="checkbox"/> Mapping CLO-LOC	
				<input type="checkbox"/> Mapping CLO-PLO	

**COURSE INFO**

<b>Course Info</b>	
Course Name	DATA MINING FOR BUSINESS APPLICATIONS
School Name	OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS
College Name	COLLEGE OF BUSINESS (UUM COB)
Credit Hours	3
Coursework (%)	70
Final (%)	30
Achievement Target (AT/QAT)	80
Component	<input type="button" value="▼"/>

**MQA Information**

Identify special requirement or resources to deliver the course (e.g., software, nursery, computer lab, simulation room etc)
Transferable Skills
Other additional information (if applicable)

**Knowledge, Cognitive, Practical, Digital**

**Traditional Lecture, Student Centered Learning, Case Studies and Online Learning.** For the assessment strategy it is a continuous assessment.

### 3.6 Synopsis

- Sinopsis kursus boleh diperolehi dari silibus sediaada
- Pastikan klik pada butang **SAVE**

Semester	G999 - (2019/2020 2 - Second)	COMPONENTS OF SYLLABUS			SYLLABUS
Course	OJMT6023- DATA MINING FOR BUSINESS APPLICATIONS	<input type="checkbox"/> Course Info	<input type="checkbox"/> Pre-Requisite	<input type="checkbox"/> CLO	<a href="#">Preview Syllabus</a>
Status	Draft	<input checked="" type="checkbox"/> Synopsis	<input type="checkbox"/> Topic/Sub Topic	<input type="checkbox"/> LOC	<a href="#">Submit for Teaching Plan</a>
		<input type="checkbox"/> Objective	<input type="checkbox"/> References	<input type="checkbox"/> Mapping CLO-LOC	
				<input type="checkbox"/> Mapping CLO-PLO	

**COURSE SYNOPSIS**

**Synopsis**

Data increasingly becomes valuable with the advent of new-age technology infrastructure, mining tools, and techniques. More and more data is available from devices, social media platforms, e-commerce, and intelligent machines. This data is now used for managerial decision-making. Data mining helps elucidate and extract useful insights from data through use of mathematical techniques. Now, this knowledge extraction has been simplified by the advancement of technologies such as SAP Hana. Recent success stories in the area of credit rating, E-commerce database marketing, CRM etc. have made the discipline in demand.

This course focuses on the use of data mining for business applications and not much on the programming or the mathematics and statistics involved in it. The emphases are on understanding the pros and cons of various tools available and identify cases for the application.

### 3.7 Objective

- Objektif kursus boleh diperolehi dari silibus sediaada
- Pastikan klik pada butang **SAVE**

Semester	G999 - (2019/2020 2 - Second)	COMPONENTS OF SYLLABUS			SYLLABUS
Course	OJMT6023- DATA MINING FOR BUSINESS APPLICATIONS	<input type="checkbox"/> Course Info	<input type="checkbox"/> Pre-Requisite	<input type="checkbox"/> CLO	<a href="#">Preview Syllabus</a>
Status	Draft	<input type="checkbox"/> Synopsis	<input type="checkbox"/> Topic/Sub Topic	<input type="checkbox"/> LOC	<a href="#">Submit for Teaching Plan</a>
		<input checked="" type="checkbox"/> Objective	<input type="checkbox"/> References	<input type="checkbox"/> Mapping CLO-LOC	
				<input type="checkbox"/> Mapping CLO-PLO	

**COURSE OBJECTIVE**

Students are expected to

- Can working knowledge of Data mining techniques in solving business problems.
- Develop an understanding of the pros and cons of data mining techniques.
- Identify relevant business applications of the data mining techniques.
- Perform data mining for different business situations using data mining applications.

### 3.8 Pre-Requisite

- Pre-Requisite kursus boleh diperolehi dari silibus sediaada
- Pastikan klik pada butang **SAVE**

Semester G999 - (2019/2020 2 - Second)  
Course OJMT6023- DATA MINING FOR BUSINESS APPLICATIONS  
Status Draft

COMPONENTS OF SYLLABUS									
1. <input type="checkbox"/> Course Info	4. <input checked="" type="checkbox"/> Pre-Requisite	7. <input type="checkbox"/> CLO							
2. <input type="checkbox"/> Synopsis	5. <input type="checkbox"/> Topic/Sub Topic	8. <input type="checkbox"/> LOC							
3. <input type="checkbox"/> Objective	6. <input type="checkbox"/> References	9. <input type="checkbox"/> Mapping CLO-LOC							
		10. <input type="checkbox"/> Mapping CLO-PLO							

**SYLLABUS**

**COURSE PRE-REQUISITE**  
NONE

**SAVE**

### 3.9 Topic/Subtopic

- Klik pada New untuk masukkan Week/Topic, Topic Content, Face to Face dan Non F2F
- Nilai pada setiap cell berikut diperolehi dari dokumen (c - Syllabus\_OJMT6023 - sheet CDM)
- Setelah selesai masukkan Week/Topic, klik simbol + untuk masukkan Subtopic (SubTopic No dan SubTopic Content)
- SubTopic No dan SubTopic Content perlu dimasukkan seperti dalam silibus
- Jumlah SLT akan dikira secara automatik (Contoh: Bagi kursus Postgraduate - 3 kredit; jumlah SLT bagi topic/subtopic adalah 70 jam) – panduan pengiraan boleh didapati dalam dokumen (c - Syllabus\_OJMT6023 - sheet BasicMQA\_SLT)

Semester G999 - (2019/2020 2 - Second)  
Course OJMT6023- DATA MINING FOR BUSINESS APPLICATIONS  
Status Draft

COMPONENTS OF SYLLABUS									
1. <input type="checkbox"/> Course Info	4. <input checked="" type="checkbox"/> Pre-Requisite	7. <input type="checkbox"/> CLO							
2. <input type="checkbox"/> Synopsis	5. <input checked="" type="checkbox"/> Topic/Sub Topic	8. <input type="checkbox"/> LOC							
3. <input type="checkbox"/> Objective	6. <input type="checkbox"/> References	9. <input type="checkbox"/> Mapping CLO-LOC							
		10. <input type="checkbox"/> Mapping CLO-PLO							

**TOPIC / SUB TOPIC**

Week/Topic	Topic Content	Face to Face				Non F2F				Total SLT		
		Lp	Tp	Pp	Op	Ls	Ts	Ps	Os		O	IL
1	Introduction to Data Mining	1	0	0	1	0	0	0	0	2	5	
2	Data Mining Process	2	0	2	1	0	0	0	0	1	4	
3	Data Mining Tools	1	0	3	2	0	0	0	0	2	5.33	
4	Data Mining Techniques	1	0	1	2	0	0	0	0	3	4.67	
5	Data Mining Applications	2	0	3	2	0	0	0	0	3	6.67	
6	Future of Data Mining	0	0	0	3	0	0	0	0	1	2.67	
7	Guest Lecture	0	0	0	3	0	0	0	0	1	2.67	
		14	0	19	14	14	0	0	0	12	70.01	
		Total SLT : 70.01										V

Semester G999 - (2019/2020 2 - Second)  
Course OJMT6023- DATA MINING FOR BUSINESS APPLICATIONS  
Status Draft

COMPONENTS OF SYLLABUS									
1. <input type="checkbox"/> Course Info	4. <input checked="" type="checkbox"/> Pre-Requisite	7. <input type="checkbox"/> CLO							
2. <input type="checkbox"/> Synopsis	5. <input checked="" type="checkbox"/> Topic/Sub Topic	8. <input type="checkbox"/> LOC							
3. <input type="checkbox"/> Objective	6. <input type="checkbox"/> References	9. <input type="checkbox"/> Mapping CLO-LOC							
		10. <input type="checkbox"/> Mapping CLO-PLO							

**TOPIC / SUB TOPIC**

Week/Topic	Topic Content	Face to Face				Non F2F				Total SLT	
		Physical	Online/Tech Mediated (Synchronous)			Online/Tech Mediated (Asynchronous)	Independent Learning				
Lp	Tp	Pp	Op	Ls	Ts	Ps	Os	O	IL		
1	Introduction to Data Mining	1	0	0	1	0	0	0	0	2	5
2	Data Mining Process	2	0	2	1	0	0	0	0	4	10
	Sub-Topic No: Sub-Topic Content	1.1	Origin of Data Mining								
		1.2	Relationship between Data Warehousing, OLAP and Data Mining								
		1.3	Knowledge Discovery in Databases								

### 3.10 References

- Pilih jenis rujukan sebelum masukkan data untuk setiap rujukan

Semester G599 - (2019/2020 2 - Second)  
Course QJMT8023: DATA MINING FOR BUSINESS APPLICATIONS  
Status Draft

COMPONENTS OF SYLLABUS									
1.	<input type="checkbox"/> Course Info	4.	<input type="checkbox"/> Pre-Requisite	7.	<input type="checkbox"/> CLO				
2.	<input type="checkbox"/> Synopsis	5.	<input type="checkbox"/> Topic/Sub Topic	8.	<input type="checkbox"/> LOC				
3.	<input type="checkbox"/> Objective	6.	<input checked="" type="checkbox"/> References	9.	<input type="checkbox"/> Mapping CLO-LOC				
				10.	<input type="checkbox"/> Mapping CLO-PLO				
<input type="button" value="Preview Syllabus"/> <input type="button" value="Submit for Teaching Plan"/>									

**SYLLABUS**

**REFERENCES**

Type	Code	Description
B	BOOK	
J	JOURNAL	
W	WEBPAGE	
N	NEWSPAPER	
M	MAGAZINE	
M	MONOGRAPH	
V	VIDEO	

List of References

Title (Secondary)	Author	Publisher	Publish Date/Year	Webpage Name	ISBN	Edit/Delete
	Boire, R	Palgrave McMillan	2014		9781137	<input type="button" value="Edit Delete"/>

Semester G599 - (2019/2020 2 - Second)  
Course QJMT8023: DATA MINING FOR BUSINESS APPLICATIONS  
Status Draft

COMPONENTS OF SYLLABUS									
1.	<input type="checkbox"/> Course Info	4.	<input type="checkbox"/> Pre-Requisite	7.	<input type="checkbox"/> CLO				
2.	<input type="checkbox"/> Synopsis	5.	<input type="checkbox"/> Topic/Sub Topic	8.	<input type="checkbox"/> LOC				
3.	<input type="checkbox"/> Objective	6.	<input checked="" type="checkbox"/> References	9.	<input type="checkbox"/> Mapping CLO-LOC				
				10.	<input type="checkbox"/> Mapping CLO-PLO				
<input type="button" value="Preview Syllabus"/> <input type="button" value="Submit for Teaching Plan"/>									

**SYLLABUS**

**REFERENCES**

Type	Author	Year / Date	Book Title	Chapter Title	Publishing City	State / Country Code	Publisher	Edition	ISBN	Page(s)	Date accessed	URL
BOOK	Edgar H. Shelley, J. T., Parker, J. O., & Walsh, D. A. L.	(1989 or (1989, February 22))	Ageing in the 1980s: Psychological issues	Contemporary issues and new directions in adult development of learning and	Washington	DC	American Psychological Association	Ed. or 1st ed. or 2nd ed.	978-3-16-148910-5	224-225	22/2/2014	<a href="http://if.iit.edu/references.html">http://if.iit.edu/references.html</a>

Add to List

List of References

No.	Title	Title (Secondary)	Author	Publisher	Publish Date/Year	Webpage Name	ISBN	Edit/Delete
1.	Data Mining for Managers		Boire, R	Palgrave McMillan	2014		9781137	<input type="button" value="Edit Delete"/>

### 3.11 CLO

- Untuk masukkan CLO, masukkan *Keyword* (Bloom Taxonomy) bagi CLO tersebut dan klik Search Keyword
- Setelah klik Search Keyword, pilihan level Taxonomy Bloom akan dipaparkan.
- Jika CLO yang dipilih diuji dalam kuiz, peperiksaan pertengahan dan peperiksaan akhir (atau apa-apa pentaksiran yang memerlukan skima jawapan) maka keperluan berikut perlu dipatuhi
  - Jika *level* Cognitive Level adalah 1 atau 2 maka Learning Outcome Cluster yang akan digunakan ialah LOC 1 (Knowledge and Understanding)
  - Jika *level* Cognitive Level adalah 3,4,5,6 maka Learning Outcome Cluster yang akan digunakan ialah LOC 2 (Cognitive)
- Jika hanya menggunakan rubrik atau praktikal maka keperluan berikut perlu dipatuhi;
  - Jika CLO diuji menggunakan rubrik maka Level Affective perlu dipilih
  - Jika CLO diuji menggunakan praktikal maka Level Psychomotor perlu dipilih
- Setelah level dipilih masukkan pula CLO content
- Pilih Program Aims Strength kepada **Yes** dan klik Add to List
- Contoh bahagian CLO yang telah siap

Semester G999 - (2019/2020 2 - Second)  
Course Status Draft

COMPONENTS OF SYLLABUS										SYLLABUS																																																																																																					
<input type="checkbox"/> Course Info	<input type="checkbox"/> Pre-Requisite	<input checked="" type="checkbox"/> CLO	<input type="checkbox"/> Preview Syllabus																																																																																																												
<input type="checkbox"/> Synopsis	<input type="checkbox"/> Topic/Sub Topic	<input type="checkbox"/> LOC	<input type="checkbox"/> Submit for Teaching Plan																																																																																																												
<input type="checkbox"/> Objective	<input type="checkbox"/> References	<input type="checkbox"/> Mapping CLO-LOC																																																																																																													
		<input type="checkbox"/> Mapping CLO-PLO																																																																																																													
<b>COURSE LEARNING OUTCOME</b>																																																																																																															
<table border="1"> <tr> <td>CLO No</td> <td>1</td> <td>i</td> <td>ii</td> <td>iii</td> </tr> <tr> <td colspan="2">Please TYPE your word</td> <td>describe</td> <td>Search Keyword</td> <td></td> </tr> <tr> <td colspan="12">Learning Taxonomy</td> </tr> <tr> <td>Domain</td> <td colspan="10">Description</td> <td>Level</td> <td>Select</td> </tr> <tr> <td>Affective</td> <td colspan="10">Receiving phenomena</td> <td>A1</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Psychomotor</td> <td colspan="10">Perception</td> <td>P1</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Cognitive</td> <td colspan="10">Remember</td> <td>C1</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Cognitive</td> <td colspan="10">Evaluate</td> <td>C5</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Cognitive</td> <td colspan="10">Understand</td> <td>C2</td> <td><input type="checkbox"/></td> </tr> </table>												CLO No	1	i	ii	iii	Please TYPE your word		describe	Search Keyword		Learning Taxonomy												Domain	Description										Level	Select	Affective	Receiving phenomena										A1	<input type="checkbox"/>	Psychomotor	Perception										P1	<input checked="" type="checkbox"/>	Cognitive	Remember										C1	<input type="checkbox"/>	Cognitive	Evaluate										C5	<input type="checkbox"/>	Cognitive	Understand										C2	<input type="checkbox"/>
CLO No	1	i	ii	iii																																																																																																											
Please TYPE your word		describe	Search Keyword																																																																																																												
Learning Taxonomy																																																																																																															
Domain	Description										Level	Select																																																																																																			
Affective	Receiving phenomena										A1	<input type="checkbox"/>																																																																																																			
Psychomotor	Perception										P1	<input checked="" type="checkbox"/>																																																																																																			
Cognitive	Remember										C1	<input type="checkbox"/>																																																																																																			
Cognitive	Evaluate										C5	<input type="checkbox"/>																																																																																																			
Cognitive	Understand										C2	<input type="checkbox"/>																																																																																																			
<b>COURSE LEARNING OUTCOME</b>																																																																																																															
<table border="1"> <tr> <td>CLO No</td> <td>1</td> <td>iv</td> </tr> <tr> <td colspan="2">Please TYPE your word</td> <td>describe</td> </tr> <tr> <td colspan="12">Learning Taxonomy</td> </tr> <tr> <td>Domain</td> <td colspan="10">Description</td> <td>Level</td> <td>Select</td> </tr> <tr> <td>Affective</td> <td colspan="10">Receiving phenomena</td> <td>A1</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Psychomotor</td> <td colspan="10">Perception</td> <td>P1</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Cognitive</td> <td colspan="10">Remember</td> <td>C1</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Cognitive</td> <td colspan="10">Evaluate</td> <td>C5</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Cognitive</td> <td colspan="10">Understand</td> <td>C2</td> <td><input type="checkbox"/></td> </tr> </table>												CLO No	1	iv	Please TYPE your word		describe	Learning Taxonomy												Domain	Description										Level	Select	Affective	Receiving phenomena										A1	<input type="checkbox"/>	Psychomotor	Perception										P1	<input checked="" type="checkbox"/>	Cognitive	Remember										C1	<input type="checkbox"/>	Cognitive	Evaluate										C5	<input type="checkbox"/>	Cognitive	Understand										C2	<input type="checkbox"/>				
CLO No	1	iv																																																																																																													
Please TYPE your word		describe																																																																																																													
Learning Taxonomy																																																																																																															
Domain	Description										Level	Select																																																																																																			
Affective	Receiving phenomena										A1	<input type="checkbox"/>																																																																																																			
Psychomotor	Perception										P1	<input checked="" type="checkbox"/>																																																																																																			
Cognitive	Remember										C1	<input type="checkbox"/>																																																																																																			
Cognitive	Evaluate										C5	<input type="checkbox"/>																																																																																																			
Cognitive	Understand										C2	<input type="checkbox"/>																																																																																																			
<table border="1"> <tr> <td>Bloom Keyword</td> <td>Selected Domain</td> <td>C2,A1,P1</td> </tr> <tr> <td>CLO Content</td> <td colspan="10">Describe the importance of Data Mining in emerging business scenarios</td> </tr> <tr> <td>Programme Aims Strength</td> <td>3-YES</td> <td>Add to List</td> </tr> </table>												Bloom Keyword	Selected Domain	C2,A1,P1	CLO Content	Describe the importance of Data Mining in emerging business scenarios										Programme Aims Strength	3-YES	Add to List																																																																																			
Bloom Keyword	Selected Domain	C2,A1,P1																																																																																																													
CLO Content	Describe the importance of Data Mining in emerging business scenarios																																																																																																														
Programme Aims Strength	3-YES	Add to List																																																																																																													
<table border="1"> <tr> <td>CLO No</td> <td>5</td> <td>vi</td> </tr> <tr> <td colspan="2">Please TYPE your word</td> <td></td> </tr> <tr> <td colspan="12">Learning Taxonomy</td> </tr> <tr> <td>Domain</td> <td colspan="10">Description</td> <td>Level</td> <td>Select</td> </tr> <tr> <td colspan="12">No data to display</td> </tr> </table>												CLO No	5	vi	Please TYPE your word			Learning Taxonomy												Domain	Description										Level	Select	No data to display																																																																				
CLO No	5	vi																																																																																																													
Please TYPE your word																																																																																																															
Learning Taxonomy																																																																																																															
Domain	Description										Level	Select																																																																																																			
No data to display																																																																																																															
<table border="1"> <tr> <td>Bloom Keyword</td> <td>Selected Domain</td> <td>C2,A1,P1</td> </tr> <tr> <td>CLO Content</td> <td colspan="10"></td> </tr> <tr> <td>Programme Aims Strength</td> <td>3-YES</td> <td>Add to List</td> </tr> </table>												Bloom Keyword	Selected Domain	C2,A1,P1	CLO Content											Programme Aims Strength	3-YES	Add to List																																																																																			
Bloom Keyword	Selected Domain	C2,A1,P1																																																																																																													
CLO Content																																																																																																															
Programme Aims Strength	3-YES	Add to List																																																																																																													
<table border="1"> <tr> <td colspan="12">List of Course Learning Outcome</td> </tr> <tr> <td>CLO No.</td> <td>CLO Content</td> <td>Bloom Keyword</td> <td>Programme Aims Strength</td> <td>Selected Domain</td> <td>Edit / Delete</td> </tr> <tr> <td>CLO1</td> <td>Describe the importance of Data Mining in emerging business scenarios</td> <td>Describe</td> <td>3-YES</td> <td>C2,P1,A1</td> <td><input type="checkbox"/></td> </tr> <tr> <td>CLO2</td> <td>Explain the data pre-processing tasks for data mining</td> <td>Explain</td> <td>3-YES</td> <td>C2,A3,P2</td> <td><input type="checkbox"/></td> </tr> <tr> <td>CLO3</td> <td>Demonstrate Business Objectives in data mining technique choices</td> <td>Demonstrate</td> <td>3-YES</td> <td>A3,C3,P5</td> <td><input type="checkbox"/></td> </tr> <tr> <td>CLO4</td> <td>Explain appropriate data mining tools for solving varied business problems</td> <td>Explain</td> <td>3-YES</td> <td>C5,A4,P2</td> <td><input type="checkbox"/></td> </tr> </table>												List of Course Learning Outcome												CLO No.	CLO Content	Bloom Keyword	Programme Aims Strength	Selected Domain	Edit / Delete	CLO1	Describe the importance of Data Mining in emerging business scenarios	Describe	3-YES	C2,P1,A1	<input type="checkbox"/>	CLO2	Explain the data pre-processing tasks for data mining	Explain	3-YES	C2,A3,P2	<input type="checkbox"/>	CLO3	Demonstrate Business Objectives in data mining technique choices	Demonstrate	3-YES	A3,C3,P5	<input type="checkbox"/>	CLO4	Explain appropriate data mining tools for solving varied business problems	Explain	3-YES	C5,A4,P2	<input type="checkbox"/>																																																										
List of Course Learning Outcome																																																																																																															
CLO No.	CLO Content	Bloom Keyword	Programme Aims Strength	Selected Domain	Edit / Delete																																																																																																										
CLO1	Describe the importance of Data Mining in emerging business scenarios	Describe	3-YES	C2,P1,A1	<input type="checkbox"/>																																																																																																										
CLO2	Explain the data pre-processing tasks for data mining	Explain	3-YES	C2,A3,P2	<input type="checkbox"/>																																																																																																										
CLO3	Demonstrate Business Objectives in data mining technique choices	Demonstrate	3-YES	A3,C3,P5	<input type="checkbox"/>																																																																																																										
CLO4	Explain appropriate data mining tools for solving varied business problems	Explain	3-YES	C5,A4,P2	<input type="checkbox"/>																																																																																																										
<table border="1"> <tr> <td colspan="12">vii</td> </tr> </table>												vii																																																																																																			
vii																																																																																																															

### 3.12 LOC (Learning Outcome Cluster)

- Untuk memilih LOC, perlu pastikan ianya sama seperti dalam silibus. Contoh: Untuk kursus OJMT6023, LOC yang akan digunakan ialah LOC1 (Knowledge and Understanding), LOC2 (Cognitive Skills), Practical Skills (LOC3a) dan Digital Skills (LOC 3d) – Rujuk dokumen (c - Syllabus\_OJMT6023 - sheet CourseInfo)

Semester G999 - (2019/2020 2 - Second)  
Course OJMT6023: DATA MINING FOR BUSINESS APPLICATIONS  
Status Draft

COMPONENTS OF SYLLABUS										SYLLABUS																													
<input type="checkbox"/> Course Info	<input type="checkbox"/> Pre-Requisite	<input checked="" type="checkbox"/> CLO	<input type="checkbox"/> Preview Syllabus																																				
<input type="checkbox"/> Synopsis	<input type="checkbox"/> Topic/Sub Topic	<input type="checkbox"/> LOC	<input type="checkbox"/> Submit for Teaching Plan																																				
<input type="checkbox"/> Objective	<input type="checkbox"/> References	<input type="checkbox"/> Mapping CLO-LOC																																					
		<input type="checkbox"/> Mapping CLO-PLO																																					
<b>LEARNING OUTCOME</b>																																							
<table border="1"> <tr> <td>CLUSTER</td> <td>LOC</td> <td>Add to List</td> </tr> <tr> <td>CLUSTER CODE</td> <td>CLUSTER</td> <td>LOC CODE</td> <td>Learning Outcome (LOC)</td> <td>Delete</td> </tr> <tr> <td>1. CLUSTER1</td> <td>KNOWLEDGE AND UNDERSTANDING</td> <td>1</td> <td>Knowledge and Understanding (LOC1)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>2. CLUSTER2</td> <td>COGNITIVE SKILLS</td> <td>1</td> <td>Cognitive Skills (LOC2)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>3. CLUSTER3</td> <td>FUNCTIONALITY WORKS SKILLS</td> <td>1</td> <td>Practical Skills (LOC3a)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>4. CLUSTER3</td> <td>FUNCTIONALITY WORKS SKILLS</td> <td>4</td> <td>Digital Skills (LOC3d)</td> <td><input type="checkbox"/></td> </tr> </table>												CLUSTER	LOC	Add to List	CLUSTER CODE	CLUSTER	LOC CODE	Learning Outcome (LOC)	Delete	1. CLUSTER1	KNOWLEDGE AND UNDERSTANDING	1	Knowledge and Understanding (LOC1)	<input type="checkbox"/>	2. CLUSTER2	COGNITIVE SKILLS	1	Cognitive Skills (LOC2)	<input type="checkbox"/>	3. CLUSTER3	FUNCTIONALITY WORKS SKILLS	1	Practical Skills (LOC3a)	<input type="checkbox"/>	4. CLUSTER3	FUNCTIONALITY WORKS SKILLS	4	Digital Skills (LOC3d)	<input type="checkbox"/>
CLUSTER	LOC	Add to List																																					
CLUSTER CODE	CLUSTER	LOC CODE	Learning Outcome (LOC)	Delete																																			
1. CLUSTER1	KNOWLEDGE AND UNDERSTANDING	1	Knowledge and Understanding (LOC1)	<input type="checkbox"/>																																			
2. CLUSTER2	COGNITIVE SKILLS	1	Cognitive Skills (LOC2)	<input type="checkbox"/>																																			
3. CLUSTER3	FUNCTIONALITY WORKS SKILLS	1	Practical Skills (LOC3a)	<input type="checkbox"/>																																			
4. CLUSTER3	FUNCTIONALITY WORKS SKILLS	4	Digital Skills (LOC3d)	<input type="checkbox"/>																																			

- ii. Pilih dropdown pada Cluster kemudian pilih LOC yang berkaitan dan klik Add to List
- iii. Ulang langkah (ii) sehingga semua LOC di pilih

The screenshot shows two main panels. On the left, under 'LEARNING OUTCOME', there's a table with columns for CLUSTER, NO., CLUSTER CODE, LOC, CODE, LOC NAME, and a dropdown menu labeled 'CLUSTER - FUNCTIONALITY WORKS SKILLS'. Below this is a table with rows numbered 1 to 4, each containing a cluster code, name, and LOC code. A red box surrounds the dropdown and the table rows. A yellow box surrounds the 'ii' label. On the right, under 'CLUSTER - LOC', there's a table with columns for LOC CODE and LOC NAME. It lists four LOCs: Knowledge and Understanding (LOC1), Cognitive Skills (LOC2), Practical Skills (LOC3a), and Digital Skills (LOC3d). Each LOC has a 'Delete' button next to it.

### 3.13 Mapping CLO-LOC

- i. Bagi memudahkan mapping CLO kepada LOC, rujuk kepada dokumen (d - AssessmentPlan-Sheet Assessment). Berpandukan AssessmentPlan ini;
  - a. Bagi memastikan CLO1 dicapai, maka LOC1 dan LOC3d akan digunakan.
  - b. Bagi memastikan CLO2 dicapai, maka LOC1 dan LOC3a akan digunakan.
  - c. Bagi memastikan CLO3 dicapai, maka LOC2 dan LOC3d akan digunakan.
  - d. Bagi memastikan CLO4 dicapai, maka LOC2, LOC3a dan LOC3d akan digunakan.

This table provides a detailed breakdown of assessment weightage across various learning outcomes. The columns represent different assessment types (Assignment 1, Assignment 2, Group Project, etc.) and the rows represent learning outcomes (LOC1 through LOC5, plus CLO1-CLO4). The 'Weightage (%)' row shows the percentage contribution of each assessment type to the total. The 'Assessment' column indicates which assessment type is used for each learning outcome. A red box highlights the 'Assessment' column and the 'Weightage (%)' row. A yellow box highlights the 'CLO1' through 'CLO4' columns.

- ii. Maka pada sistem OBE, mapping boleh terus dilakukan
  - a. Klik CLO1
  - b. Pilih SubElement yang berkaitan dan klik Mapping
  - c. Untuk mapping seterusnya, Klik CLO2 dan ulang langkah (a) dan (b)

The screenshot shows the 'MAPPING CLO - LOC' interface. On the left, there's a table for 'List of Course Learning Outcome' with columns for CLO No, CLO Content, and a dropdown menu. A red box highlights the 'List of Course Learning Outcome' section. A yellow box highlights the 'Sub Element' section, which contains a table for 'Mapping' with columns for Cluster Co, LOC Code, Learning Outcome-LOC, and a dropdown menu. It lists four sub-elements: CLUSTER1\_1 (Knowledge and Understanding (LOC1)), CLUSTER2\_1 (Cognitive Skills (LOC2)), CLUSTER3\_1 (Practical Skills (LOC3a)), and CLUSTER3\_4 (Digital Skills (LOC3d)). Each sub-element has a 'Delete' button next to it. A yellow box also surrounds the 'ii(a)' label.

### 3.14 Mapping CLO-PLO

- i. Mapping CLO – PLO adalah berpandukan kepada Mapping CLO-LOC
- ii. Rujuk dokumen (d -AssessmentPlan – Sheet Mapping LOC\_PLO)
- iii. Berdasarkan 3.13 kita dapatkan bahawa kursus OJMT 6023 adalah seperti berikut

CLO Number	LOC	PLO
CLO1	LOC1	PLO1 -Demonstrate advanced business knowledge, skills, and management techniques in a global business environment.
	LOC3d	PLO6- Integrate and exercise a wide range of suitable digital technologies and software application to enhance work practices.
CLO2	LOC1	PLO1 -Demonstrate advanced business knowledge, skills, and management techniques in a global business environment.
	LOC3a	PLO3 - Apply technical and practical skills to operate the organisation in an economically, socially, and environmentally sustainable manner.
CLO3	LOC2	PLO2-Exercise analytical ability in systematically solving business related problems via the application of scientific approaches or methods
	LOC3d	PLO6- Integrate and exercise a wide range of suitable digital technologies and software application to enhance work practices.
CLO4	LOC2	PLO2-Exercise analytical ability in systematically solving business related problems via the application of scientific approaches or methods
	LOC3a	PLO3 - Apply technical and practical skills to operate the organisation in an economically, socially, and environmentally sustainable manner.
	LOC3d	PLO6- Integrate and exercise a wide range of suitable digital technologies and software application to enhance work practices.

- iv. Klik pada CLO1  
 v. Pilih Program; Contoh M217: MBA

The screenshot shows a software application for managing learning outcomes. On the left, there's a list of CLOs (Learning Objectives) with descriptions:

- CLO1: Describe the importance of Data Mining in emerging business scenarios
- CLO2: Explain the data pre-processing tasks for data mining
- CLO3: Demonstrate Business Objectives in data mining technique choices.
- CLO4: Explain appropriate data mining tools for solving varied business problems

A red box labeled 'iv' highlights the CLO1 row. In the center, a dropdown menu labeled 'Program' shows 'M217-MBA' selected. A red box labeled 'v' highlights this dropdown. To the right, a table lists 'List of Program Learning Outcome' with columns for 'Program', 'PLO N.', 'Description', 'Strength of Relationship', and 'Delete'. The table contains the following data:

Program	PLO N.	Description	Strength of Relationship	Delete
M217	PLO1	Demonstrate advanced business knowledge, skills, and management techniques in a global business environment.	3-YES	Delete
M217	PLO6	Integrate and exercise a wide range of suitable digital technologies and software application to enhance work practices.	3-YES	Delete

vi. Pilih PLO yang berkaitan

The screenshot shows the 'MAPPING CLO-PLO' window. On the left, there's a table for 'Course Learning Outcome' with rows for CLO1 through CLO4. On the right, there's a table for 'Program PLO' with rows for PLO11 through PLO6. A red box highlights the 'Strength of Relationship' dropdown menu, which is set to 'YES'. A white box labeled 'vi' is placed over the 'Mapping' button at the top right.

vii. Pilih Strength of Relationship = Yes dan Klik Mapping

The screenshot shows the same 'MAPPING CLO-PLO' window. The 'Strength of Relationship' dropdown is now explicitly set to 'YES'. A red box highlights the 'Mapping' button at the top right. A white box labeled 'vii' is placed over the 'Mapping' button.

viii. Ulang langkah (iv) hingga (vii) hingga semua CLO di *mapping* kepada PLO

### 3.15 Submit for Teaching Plan

- Setelah selesai, masukkan semua data, Klik Preview Silibus untuk lihat silibus yang dimasukkan (Lihat contoh pada folder <https://bit.ly/ManualOBE>)
- Apabila telah puas hati dengan data yang dimasukkan Klik Submit for Teaching Plan untuk ke fasa Setup Teaching Plan

The screenshot shows the 'SYLLABUS' tab and the 'MAPPING CLO-PLO' interface. The 'SYLLABUS' tab has several checkboxes for syllabus components. A red box highlights the 'Preview Syllabus' button. Below it, the 'MAPPING CLO-PLO' interface shows the mapping table with CLOs and PLOs. A white box labeled 'i,ii' is placed over the 'Preview Syllabus' button.

iii. Klik Continue to Syllabus/Teaching Plan

Course Info

Synopsis

Objective

Reference

Course Learning Outcome

Course Topic

Softskills

Mapping CLO - PLO

Mapping CLO - Softskills



**Continue to Syllabus Setup/Teaching Plan**

iii

### 3.16 Edit Syllabus

i. Jika ada keperluan untuk edit semula silibus maka perlu Klik pada Edit Syllabus

The screenshot shows a vertical navigation menu on the left side of a web application. The menu items are categorized under 'COURSE COORDINATOR' and 'LECTURER'. Under 'COURSE COORDINATOR', there is a 'Syllabus' section with three options: 'Syllabus / Teaching Plan', 'View PLO', and 'Edit Syllabus'. The 'Edit Syllabus' option is highlighted with a red box. Under 'LECTURER', there are sections for 'Scheme Of Work', 'Syllabus', and 'Student's Result', each containing several sub-options. A red box also surrounds the 'Edit Syllabus' item in the 'Syllabus' section.

ii. Pilih semester untuk kursus yang hendak dikemaskini (Contoh G999)

The screenshot shows a 'List of Course' table titled 'EDIT SYLLABUS STATUS'. It includes columns for Semester, Course Code, Course Description, and Course Status. There is a 'Change Status to Draft' button at the bottom right. A red box highlights the 'Semester' dropdown and another red box highlights the 'Change Status to Draft' button.

iii. Pilih kursus yang hendak di Edit (Contoh: OJMT6023)

The screenshot shows the same 'List of Course' table from the previous step. A red box highlights the entire table. Another red box highlights the 'Edit' button next to the row where 'OJMT6023' is listed.

iv. Tukar status kepada Draft

v. Klik Update

The screenshot shows the 'List of Course' table again. The 'Course Status' for 'OJMT6023' has been changed to 'D-Draft'. A red box highlights the 'Course Status' dropdown for 'OJMT6023'. Another red box highlights the 'Update' button at the bottom right of the table.

#### 4. Setup Teaching Plan

##### 4.1 Klik pada Setup Teaching Plan untuk kursus OJMT6023

LIST OF COURSES		
Semester	G999 - (2019/2020 2 - Second)	
No.	Course Code	Course Description
1.	OJMT6023	DATA MINING FOR BUSINESS APPLICATIONS
2.	OJMT6033	DATA VISUALIZATION FOR CONSUMER INSIGHT

Setup Syllabus	Setup Teaching Plan	Print Student Format	Print HQA Format
<a href="#">Setup Syllabus</a>	<a href="#">Setup Teaching Plan</a>	<a href="#">Print Student Format</a>	<a href="#">Print HQA Format</a>
<a href="#">Syllabus Not Reviewed</a>	<a href="#">Syllabus Not Reviewed</a>	<a href="#">Student Format</a>	<a href="#">HQA Format</a>

##### 4.2 Terdapat 6 komponen yang perlu diisi seperti berikut

TEACHING PLAN		
Semester	G999 - (2019/2020 2 - Second)	
Course	OJMT6023- DATA MINING FOR BUSINESS APPLICATIONS	
Status	Draft	
	<input type="checkbox"/> Teaching Plan Approval Details	
COMPONENTS OF TEACHING PLAN		
1.	<input type="checkbox"/> View Topic	4. <input type="checkbox"/> Setup Assessment
2.	<input type="checkbox"/> Teaching Method	5. <input type="checkbox"/> Setup SLT
3.	<input type="checkbox"/> Setup SOW	6. <input type="checkbox"/> Setup Cluster-LOC Mapping
		<a href="#">Preview Teaching Plan</a>
		<a href="#">Submit for approval</a>

##### 4.3 View Topic

- i. Data pada View Topic ditarik secara automatik dari Setup Syllabus (Tiada Perubahan Perlu Dilakukan)

Week/Topic	Topic Content	Face to Face								Non F2F				Total SLT	
		Physical				Online/Tech Mediated (Synchronous)				Online/Tech Mediated (Async)		Independent Learning			
		Lp	Tp	Pp	Op	Ls	Ts	Ps	Os	O	IL				
1	Introduction to Data Mining									1	2			5	
		1	0	0	1	0	0	0	0						
2	Data Mining Process									1	4			10	
		2	0	2	1	0	0	0	0						
3	Data Mining Tools									2	5.33			13.33	
		1	0	3	2	0	0	0	0						
4	Data Mining Techniques									3	4.67			11.67	
		1	0	1	2	0	0	0	0						
5	Data Mining Applications									3	6.67			16.67	
		2	0	3	2	0	0	0	0						
6	Future of Data Mining									1	2.67			6.67	
		0	0	0	3	0	0	0	0						
7	Guest Lecture									1	2.67			6.67	
		0	0	0	3	0	0	0	0						
		Lp : 7	Tp : 0	Pp : 9	Op : 14	Ls : 0	Ts : 0	Ps : 0	Os : 0	O : 12	IL : 28.01	Total : 70.			

##### 4.4 Teaching Method

- i. Menu ini untuk memasukkan semua Teaching Method bagi kursus OJMT6023. Maklumat ini boleh disemak pada 4.3 View Topic  
ii. Didapati dari komponen View Topic, kursus OJMT6023 akan menggunakan seperti berikut:

Teaching Method
Lecture F2F Physical
Practical F2F Physical
Others F2F Physical
Others NF2F – OL - Asynchronous

- iii. Berdasarkan pada 4.4(ii), maka perlu pilih Teaching Method dari list Teaching Method dan Klik Add to List.
- iv. Ulang langkah 4.4(iii) sehingga semua Teaching Method dimasukkan

TEACHING METHOD			
No.	Category	Sub Category	Add to List
	NF2F-OL-Asynchronous	OTHERSINF2F-OL-(ASYNCHRONOUS)	
	F2F-Physical	LECTUREF2F-PHYSICAL	
	F2F-Physical	TUTORIALF2F-PHYSICAL	
	F2F-Physical	PRACTICALF2F-PHYSICAL	
	F2F-OL-Synchronous	OTHERSF2F-OL-PHYSICAL	
	F2F-OL-Synchronous	TUTORIALF2F-OL-SYNCHRONOUS	
	F2F-OL-Synchronous	LECTUREF2F-OL-SYNCHRONOUS	

List of Teaching Method	
Teaching Method	Delete
OTHERSINF2F-OL-(ASYNCHRONOUS)	Delete
LECTUREF2F-PHYSICAL	Delete
PRACTICALF2F-PHYSICAL	Delete
OTHERSF2F-OL-PHYSICAL	Delete

## 4.5 Setup Schema of Work (SOW)

- i. Untuk memasukkan data SOW, Klik New

Week	Topic	Hour	AVA	Remarks	
1	1-Introduction to Data Mining	3	Ice Breaking using Padlet, Introduction using Blendspace and GoogleDrive	Including Online Learning	<b>i</b> Edit New Delete
2	2-Data Mining Process	3	Flipped Classroom using notes from Youtube, Excel and Google Drive		Edit New Delete
3	2-Data Mining Process	3	Flipped Classroom using notes from Youtube, Excel and Google Drive	Including Online Learning	Edit New Delete
4	3-Data Mining Tools	3	Flipped Classroom using notes from Youtube, Excel and Google Drive		Edit New Delete
5	3-Data Mining Tools	5	Flipped Classroom using notes from Youtube, Excel and Google Drive	Including Online Learning	Edit New Delete
6	4-Data Mining Techniques	3	Flipped Classroom using notes from Youtube, Excel and Google Drive		Edit New Delete
7	4-Data Mining Techniques	4	Flipped Classroom using notes from Youtube, Excel and Google Drive	Including Online Learning	Edit New Delete
8	5-Data Mining Applications	3	Flipped Classroom using notes from Youtube, TED Talks and Google Drive		Edit New Delete
9	5-Data Mining Applications	3	Flipped Classroom using notes from Youtube, TED Talks and Google Drive	Including Online Learning	Edit New Delete
10	5-Data Mining Applications	4	Flipped Classroom using notes from Youtube, TED Talks and Google Drive		Edit New Delete

- ii. Masukkan Week, Topic , Hour , AVA dan Remarks dan Klik Update

Week	Topic	Hour	AVA	Remarks	
Week:	Topic:	Hour:	AVA:	Remarks:	<b>ii</b> Update Cancel

- iii. Tekan symbol +, pada Week yang telah dimasukkan

Week	Topic	Hour	AVA	Remarks	
1	1-Introduction to Data Mining	3	Ice Breaking using Padlet, Introduction using Blendspace and GoogleDrive	Including Online Learning	<b>iii</b> Edit New Delete
2	2-Data Mining Process	3	Flipped Classroom using notes from Youtube, Excel and Google Drive		Edit New Delete
3	2-Data Mining Process	3	Flipped Classroom using notes from Youtube, Excel and Google Drive	Including Online Learning	Edit New Delete
4	3-Data Mining Tools	3	Flipped Classroom using notes from Youtube, Excel and Google Drive		Edit New Delete
5	3-Data Mining Tools	5	Flipped Classroom using notes from Youtube, Excel and Google Drive	Including Online Learning	Edit New Delete
6	4-Data Mining Techniques	3	Flipped Classroom using notes from Youtube, Excel and Google Drive		Edit New Delete
7	4-Data Mining Techniques	4	Flipped Classroom using notes from Youtube, Excel and Google Drive	Including Online Learning	Edit New Delete
8	5-Data Mining Applications	3	Flipped Classroom using notes from Youtube, TED Talks and Google Drive		Edit New Delete
9	5-Data Mining Applications	3	Flipped Classroom using notes from Youtube, TED Talks and Google Drive	Including Online Learning	Edit New Delete
10	5-Data Mining Applications	4	Flipped Classroom using notes from Youtube, TED Talks and Google Drive		Edit New Delete

- iv. Masukkan data untuk Subtopic (Klik New dan Update - Ulang seingga semua data Subtopic dimasukkan)
- v. Masukkan data untuk Course Learning Outcome (Klik New dan Update - Ulang seingga semua data Course Learning Outcome dimasukkan)
- vi. Masukkan data untuk Teaching Method (Klik New dan Update - Ulang seingga semua data Teaching Method dimasukkan)

Week	Topic	Hour	AVA	Remarks	
1	1-Introduction to Data Mining	3	Ice Breaking using Padlet, Introduction using Blendspace and GoogleDrive	Including Online Learning	<b>iv,v,v</b> Edit New Delete
	Sub Topic	Course Learning Outcome	Teaching Method		
	Sub Topic	Sub Topic	Sub Topic		
	Sub Topic	Sub Topic	Sub Topic		
	Sub Topic	Sub Topic	Sub Topic		



COURSEWORK		
List of Coursework		
Coursework	Coursework Category	Total Mark Weightage %
Assignment 1: Data Preprocessing	ASSIGNMENT	15 15.0

Update Cancel

- vii. Setelah Klik Update, Klik semula pada Row Assignment 1: Data Preprocessing untuk mengaktifkan bahagian kemasukkan markah mengikut CLO
- viii. Pastikan nama pada bahagian CLO/Question for Assignment adalah sama dengan nama Coursework yang dipilih.

CLO / Question		
New	CLO / Question for Assignment 1: Data Preprocessing	No data to display

vii viii

- ix. Klik New untuk masukkan markah mengikut CLO dan LOC
- x. Masukkan Topik untuk Assignment tersebut
- xi. Masukkan CLO yang hendak dicapai bagi Coursework tersebut
- xii. Masukkan Total Mark (Weightage akan dikira secara automatic)
- xiii. Klik Update

CLO / Question - Assessment		
Topic	CLO / Question	LOC Mark
2-7	CLO2 - Explain the data pre-processing tasks for data mining	15 15.00

vii viii

- xiv. Setelah Klik Update, Column LOC Mark akan diaktifkan
- xv. Klik pada Click Here

CLO / Question - Assessment		
Topic	CLO / Question	LOC Mark
2-7	CLO2 - Explain the data pre-processing tasks for data mining	15 15.00 Click Here

xvi xvii xviii xix xx

- xvi. Satu Popup menu akan dipaparkan mengikut Mapping yang telah dilakukan. Merujuk pada contoh yang diberi, CLO2 telah dimapping kepada LOC 1 dan LOC3a.
- xvii. Bagi Assignment 1: Data Preprocessing, LOC yang hendak diuji hanyalah LOC3a
- xviii. Jadi markah hanya perlu dimasukkan pada LOC3a. (**Jika satu Assignment menguji banyak LOC, pastikan LOC tersebut di mapping telebih dahulu**)
- xix. Masukkan Total Marks
- xx. Masukkan Weightage
- xxi. Pastikan Total Marks dan Weightage yang dimasukkan sama.

xxii. Klik Save

Cluster	Attributes	Total Mark	Weightage
CLUSTER1	Knowledge and Understanding (LOC1)	0	0
CLUSTER3	Practical Skills (LOC3a)	15	15

Total Mark : 15  
Total Weightage : 15

xxii      Save      Close

- xxiii. Ulang langkah ix – xxii, jika satu Assignment menguji lebih dari satu CLO.
- xxiv. Untuk masukkan Coursework seterusnya Klik pada New pada Assignment I: Data Preprocessing

COURSEWORK			
Coursework	List of Coursework	Coursework Category	Total Mark
Assignment I: Data Preprocessing		ASSIGNMENT	15
Assignment II: Data Mining Applications		ASSIGNMENT	15
Presentation		PRESENTATION	10
Group (Case Project)		PROJECT	30

xxiv

- xxv. Ulang langkah iii – xxiv sehingga selesai semua Coursework
- xxvi. Pastikan Total Weightage untuk Coursework adalah bersamaan dengan Total Weightage kursus masing-masing. Bagi contoh ini, kursus OJMT6023 pecahan Coursework ialah 70% manakala Final Exam ialah 30%.

COURSEWORK			
Coursework	List of Coursework	Coursework Category	Total Mark
Assignment I: Data Preprocessing		ASSIGNMENT	15
Assignment II: Data Mining Applications		ASSIGNMENT	15
Presentation		PRESENTATION	10
Group (Case Project)		PROJECT	30

xxvi

- xxvii. Untuk masukkan data pada Final Exam, Klik New

FINAL EXAM		
Total Mark	Weightage %	
	No data to display	

xxvii

- xxviii. Masukkan Total Mark untuk Final Exam
- xxix. Masukkan Weightage untuk Final Exam
- xxx. Klik Update

FINAL EXAM		
Total Mark	Weightage %	
100	30.0	

xxviii      xxix      xxx

- xxxii. Klik semula pada Row markah Total Mark untuk mengaktifkan bahagian kemasukkan markah mengikut CLO (CLO/Question for Final Exam)

FINAL EXAM			
Total Mark	Weightage %	30	New Delete
100		Total Weightage : 30	
CLO / Question for FINAL EXAM			
Topic	CLO / Question	Total Mark	Weightage %
1,2,5,6,7	CLO1 - Describe the importance of Data Mining in emerging business scenarios	10	MQF Mark
		Total Mark : 0	Total Weightage : 0

- xxxiii. Klik New untuk masukkan markah Final Exam mengikut CLO (dalam contoh ini, Final Exam meliputi 4 CLO dengan pecahan CLO1=10%, CLO2=20%, CLO3=30% dan CLO4=40%).

FINAL EXAM			
Total Mark	Weightage %	30	New Delete
100		Total Weightage : 30	
CLO / Question for FINAL EXAM			
Topic	CLO / Question	Total Mark	Weightage %
1,2,5,6,7	CLO1 - Describe the importance of Data Mining in emerging business scenarios	10	MQF Mark
		Total Mark : 0	Total Weightage : 0

xxxiii. Masukkan Topic  
 xxxiv. Pilih CLO yang berkaitan  
 xxxv. Masukkan Total Mark  
 xxxvi. Weightage % akan dikira secara automatic  
 xxxvii. Klik Update

FINAL EXAM			
Total Mark	Weightage %	30	New Delete
100		Total Weightage : 30	
CLO / Question - Assessment Final			
Topic	CLO / Question	Total Mark	Weightage %
1,2,5,6,7	CLO1 - Describe the importance of Data Mining in emerging business scenarios	10	MQF Mark
		Total Mark : 10	Total Weightage : 3

- xxxviii. Pada Column MQF Mark Klik Click Here
- xxxix. Satu menu Popup akan dikeluarkan untuk masukkan markah mengikut LOC.  
**\*Pastikan markah dimasukkan hanya pada LOC yang berkenaan sahaja.**

- xl. Masukkan Mark dan Klik Save

List of LOC Attributes		
MQF Code	Attributes	Total Mark
CLUSTER1	Knowledge and Understanding (LOC1)	0
CLUSTER3	Digital Skills (LOC3d)	0
Total Mark : 10		
<input type="button" value="Save"/> <input type="button" value="Close"/>		

Footer

- xli. Klik NEW pada CLO/Question – Assessment Final untuk CLO yang seterusnya

FINAL EXAM		
Total Mark	Weightage %	
100	30	New Delete
Total Weightage : 30		
Topic	CLO / Question	
1,2,5,6,7	CLO1 - Describe the importance of Data Mining in emerging business scenarios	Total Mark Weightage %
		10 3
		New Delete Click Here
Total Mark : 10 Total Weightage : 3		

- xlii. Ulang langkah xxxiii – xli sehingga selesai masukkan markah Final Exam 100 %

- xliii. Contoh Final Exam OJMT6023

FINAL EXAM		
Total Mark	Weightage %	
100	30	New Delete Click Here
Total Weightage : 30		
Topic	CLO / Question	
4-7	CLO4 - Explain appropriate data mining tools for solving varied business problems	Total Mark Weightage %
3-7	CLO3 - Demonstrate Business Objectives in data mining technique choices.	40 12
2-7	CLO2 - Explain the data pre-processing tasks for data mining	New Delete Click Here
1,2,5,6,7	CLO1 - Describe the importance of Data Mining in emerging business scenarios	30 9
		20 6
		10 3
Total Mark : 100 Total Weightage : 30		

#### 4.7 Setup SLT

- Terdapat 2 bahagian untuk Setup SLT. Bahagian pertama ialah SLT untuk Teaching and Learning dan bahagian kedua untuk Asssement.
- Bahagian 1 (Teaching and Learning), data ditarik secara automatik dari komponen View Topic
- Bahagian 2 (Assessment), perlu dimasukkan secara manual.
- Pada bahagian 2 (Assessment), data untuk Assessment dan Mark ditarik secara automatik dari komponen Setup Assessment
- Untuk masukkan nilai SLT pada bahagian Assessement, klik pada Edit

SETUP SLT								
Teaching & Learning		Student Learning Time (SLT)						
Physical Delivery-Face to Face		30						
Online/Technology Mediated(Synchronous) Delivery - F2F		0						
Online/Technology Mediated(Asynchronous) Delivery - NF2F		12						
Independent Learning		0						
Total Student Learning Time : 42								
No.	Assessment	Mark	Implementation	Preparation	F2F-Phy	F2F-Sync	NF2F-Async	Total Student Learning Time
<b>ASSESSMENT</b>								
	Assignment I: Data Preprocessing	15.00	0	0	0	0	0	Edit
	Assignment II: Data Mining Applications	15.00	0	0	0	0	0	Edit
	Group (Case Project)	30.00	0	0	0	0	0	Edit
	Presentation	10.00	0	0	0	0	0	Edit
	FINAL EXAM	30.00	3	12	3	0	0	Edit
		100.00	3	12	3	0	0	Total Assessment : 15

Total (T&L) + Assessment 0  
Course Credit Hours 3  
Total Notional Hours 2  
Calculated Credit Hours 2

- Untuk masuk nilai Implementation, Preparation, F2F-Phy, F2F-Sync, NF2F-Async perlu rujuk kepada dokumen (c - Syllabus\_OJMT6023 - Sheet SummarySLT)
- Nilai pada Total Student Learning Time akan dikira secara automatik
- Pastikan Total Credit Hours adalah betul

Summary of Student Learning Times							
Learning and Teaching Activities	SLT						
Physical Delivery - Face to Face	30						
Online/Technology Mediated (Synchronous) Delivery - F2F	0						
Online/Technology Mediated (Asynchronous) Delivery - Non F2F	12						
Independent Learning	28						
Total SLT - TnL Activities	70						
Assessment	%Mark	Implementation	Preparation	F2F-Phy	F2F-Sync	NF2F-Async	Total
Quiz 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Online Quiz 1	0	0.00	0.00	0.00	0.00	0.00	0.00
Quiz 2	0	0.00	0.00	0.00	0.00	0.00	0.00
Quiz 3	0	0.00	0.00	0.00	0.00	0.00	0.00
Quiz 4	0	0.00	0.00	0.00	0.00	0.00	0.00
Mid Semester	0	0.00	0.00	0.00	0.00	0.00	0.00
Test	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A1:DataPreprocessing	15	4.40	3.60	4.40	0.00	0.00	8.00
A2: Data Mining Application	15	4.40	3.60	4.40	0.00	3.50	8.00
A3:Case Project	30	7.95	8.55	7.95	0.00	0.00	16.50
A4:Presentation	10	1.75	0.75	1.75	0.00	0.00	2.50
Please Define	0	0.00	0.00	0.00	0.00	0.00	0.00
Final Exam	30	3.00	12.00	3.00	0.00	0.00	15.00
Total	100.00	21.50	28.50	21.50	0.00	3.50	50.00
Total SLT	<b>120.00</b>						
Credit Hours	<b>3.00</b>						

| CourseInfo | CDM | Assessment | **SummarySLT** | MQFTable4 | Indicator | Code | BasicMQA\_SLT | + |

SETUP SLT										
	Teaching & Learning	Student Learning Time (SLT)								
	Physical Delivery-Face to Face	30								
	Online/Technology Mediated(Synchronous) Delivery - F2F	0								
	Online/Technology Mediated(Asynchronous) Delivery - NF2F	12								
	Independent Learning	0								
	Total Student Learning Time : 42									
No.	Assessment	Mark	Implementation	Preparation	F2F-Phy	F2F-Sync	NF2F-Async	Total Student Learning Time		
ASSESSMENT										
	Assignment I: Data Preprocessing	15.00	4.4	3.6	4.4	0	0	8	Edit	
	Assignment II: Data Mining Applications	15.00	4.4	3.6	4.4	0	0	8	Edit	
	Group (Case Project)	30.00	7.95	8.55	7.95	0	0	16.5	Edit	
	Presentation	10.00	1.75	0.75	1.75	0	0	2.5	Edit	
	FINAL EXAM	30.00	3	12	3	0	0	15	Edit	
		100.00	21.5	28.5	21.5	0	0	Total Assessment : 50		
Total (T&L) + Assessment		0								
Course Credit Hours		3								
Total Notional Hours		3								
Calculated Credit Hours		3								

viii

vii

vi

#### 4.8 Setup Cluster-LOC Mapping

- Klik pada setiap nama LOC untuk mengaktifkan Menu List of Teaching Method dan Menu List of Assessment
- Contoh: Klik pada LOC1 (Knowledge and Understanding)
- Klik New pada menu List of Teaching Plan

**Setup CLUSTER-LOC Mapping**

List of CLUSTER - LOC		
NO.	CLUSTER	LOC
1.	KNOWLEDGE AND UNDERSTANDING	Knowledge and Understanding (LOC1)
2.	COGNITIVE SKILLS	Cognitive Skills (LOC2)
3.	FUNCTIONALITY WORKS SKILLS	Practical Skills (LOC3a)
4.	FUNCTIONALITY WORKS SKILLS	Digital Skills (LOC3d)

List Of Teaching Method		List Of Assessment	
No.	Teaching Method	No.	Assessment Name
	New		New
No data to display		No data to display	

- iv. Pilih Teaching Method yang digunakan untuk LOC1(Knowledge dan Understanding)
- v. Klik Update
- vi. Ulang Langkah i-v sehingga selesai

**Setup CLUSTER-LOC Mapping**

List of CLUSTER - LOC		
NO.	CLUSTER	LOC
1.	KNOWLEDGE AND UNDERSTANDING	Knowledge and Understanding (LOC1)
2.	COGNITIVE SKILLS	Cognitive Skills (LOC2)
3.	FUNCTIONALITY WORKS SKILLS	Practical Skills (LOC3a)
4.	FUNCTIONALITY WORKS SKILLS	Digital Skills (LOC3d)

List Of Teaching Method		List Of Assessment	
No.	Teaching Method	No.	Assessment Name
	iv		New
Category	Teaching Method	Update Cancel	No data to display
TRADITIONAL LECTURE	LECTUREP2F-PHYSICAL		
PRACTICAL	PRACTICALF2F-PHYSICAL		
SCI/OTHERS	OTHERSF2F-OL-PHYSICAL		
ONLINE LEARNING	OTHERSNP2F-OL-(ASYNCHRONOUS)		

- vii. Untuk List of Assessment – Klik New pada menu List of Assessment

**Setup CLUSTER-LOC Mapping**

List of CLUSTER - LOC		
NO.	CLUSTER	LOC
1.	KNOWLEDGE AND UNDERSTANDING	Knowledge and Understanding (LOC1)
2.	COGNITIVE SKILLS	Cognitive Skills (LOC2)
3.	FUNCTIONALITY WORKS SKILLS	Practical Skills (LOC3a)
4.	FUNCTIONALITY WORKS SKILLS	Digital Skills (LOC3d)

List Of Teaching Method		List Of Assessment	
No.	Teaching Method	No.	Assessment Name
	New		New
No data to display		No data to display	

- viii. Pilih Assessment yang digunakan untuk menguji LOC1 (Knowledge and Understanding)
- ix. Klik Update
- x. Ulang Langkah I, vii, viii ix sehingga selesai

**Setup CLUSTER-LOC Mapping**

List of CLUSTER - LOC		
NO.	CLUSTER	LOC
1.	KNOWLEDGE AND UNDERSTANDING	Knowledge and Understanding (LOC1)
2.	COGNITIVE SKILLS	Cognitive Skills (LOC2)
3.	FUNCTIONALITY WORKS SKILLS	Practical Skills (LOC3a)
4.	FUNCTIONALITY WORKS SKILLS	Digital Skills (LOC3d)

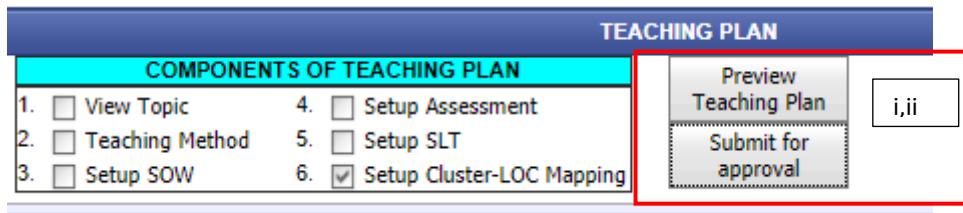
List Of Teaching Method		List Of Assessment	
No.	Teaching Method	No.	Assessment Name
	New		A1: Data PreProcessing
No data to display		A2: Data Mining Tools	
		Presentation	
		Group (Case Project)	
		FINAL EXAM	

xi. Contoh setelah selesai untuk LOC1 (Knowledge and Understanding)

Setup CLUSTER-LOC Mapping	
List of CLUSTER - LOC	
NO.	CLUSTER
1.	KNOWLEDGE AND UNDERSTANDING
2.	COGNITIVE SKILLS
3.	FUNCTIONALITY WORKS SKILLS
4.	FUNCTIONALITY WORKS SKILLS
LOC	
	Knowledge and Understanding (LOC1)
	Cognitive Skills (LOC2)
	Practical Skills (LOC3a)
	Digital Skills (LOC3d)
List Of Teaching Method	
No.	Teaching Method
1.	TRADITIONAL LECTURE-LECTURE2F-PHYSICAL
2.	PRACTICAL-PRACTICAL2F-PHYSICAL
3.	SCL/OTHERS-OTHERSF2F-OL-PHYSICAL
4.	ONLINE LEARNING-OTHERSNF2F-OL-(ASYNCHRONOUS)
New	Delete
List Of Assessment	
No.	Assessment Name
1.	FINAL EXAM
New	Delete

4.9 Submit for Approval

- i. Setelah selesai, masukkan semua data, Klik Preview Teaching Plan untuk semak Teaching Plan yang dimasukkan
- ii. Apabila telah puas hati dengan data yang dimasukkan Klik Submit for Approval untuk di luluskan oleh Dekan Pusat Pengajian



- iii. Pengesahan beserta 5 tanda Tick akan kelihatan sekiranya semua data telah dimasukkan.

- |                                      |  |
|--------------------------------------|--|
| Teaching Method                      |  |
| Assessment - Final                   |  |
| Assessment (Coursework)              |  |
| Assessment - MQFMark NEW             |  |
| Scheme of Work                       |  |
| SLT - Final credit hours less than 3 |  |
| Mapping Softskills - Teaching Method |  |
| Mapping Softskills - Assessment      |  |

4.10 Contoh Teaching Plan OJMT6023 pada folder <https://bit.ly/ManualOBE>