

## How to re-design and revise Course Information (CI) elements: CLO, TLA, AT & SLT - with Constructive Alignment?

- **Target audience** : Course owners and course coordinators from the School of Computing, UTM.
- **Sharing outcome** : Guidelines on how to plan, re-design, and revise the existing CIs, especially after the CAR CQI presentation.



*Speaker*  
**DR. NORAINI**



*Moderator*  
**MS. HAZINAH**



**14TH MAR  
2022**



**2:30PM - 3:30PM  
MONDAY**

Online: **Webex Meeting**  
<https://bit.ly/SCFREE-2022Sharing-1>

Organizer: SC Future Ready Educator (FREE) Group

# Thank you....



**ECEE** CENTRE FOR  
ENGINEERING EDUCATION  
UNIVERSITI TEKNOLOGI MALAYSIA



## Credits to Experts

AP Dr. Rohaya (UTM SoE, FSSH)

AP Dr. Yudariah (UTM CEE)

AP Dr. Naziha (UTM SoEE, FE)

Go to [www.menti.com](http://www.menti.com) and use the code 5241 6378

# Currently, I am a ... (for next semester 2, 2021/2022)

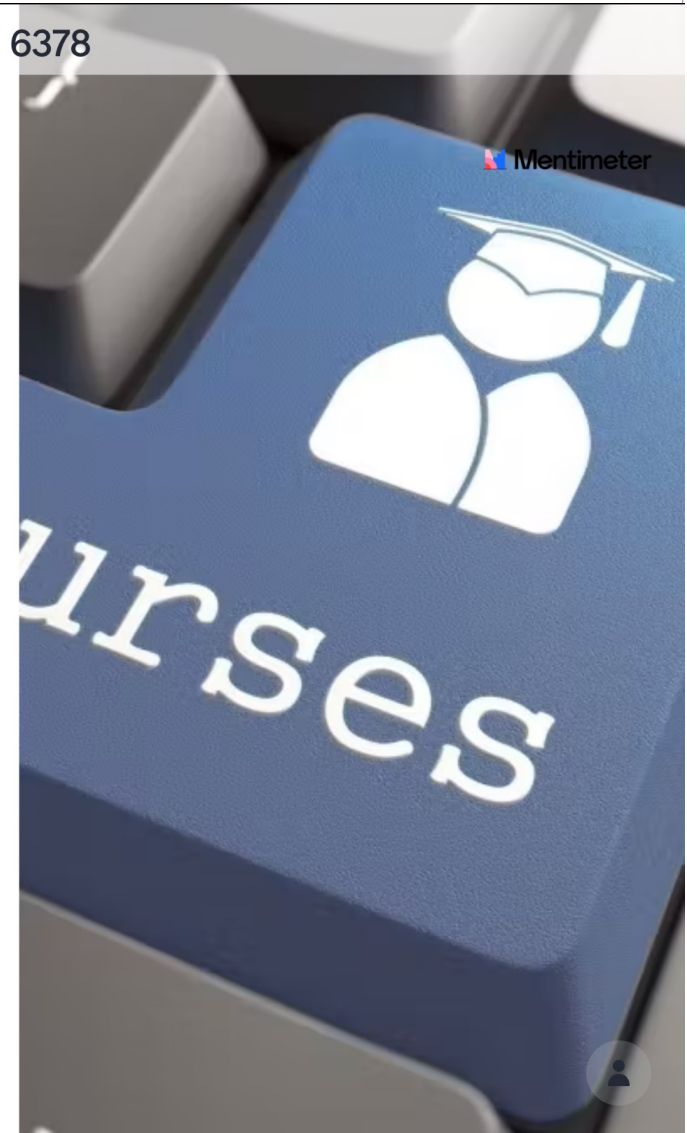
Course Owner

Course Coordinator

Course Lecturer

Others

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Go to [www.menti.com](http://www.menti.com) and use the code 5241 6378

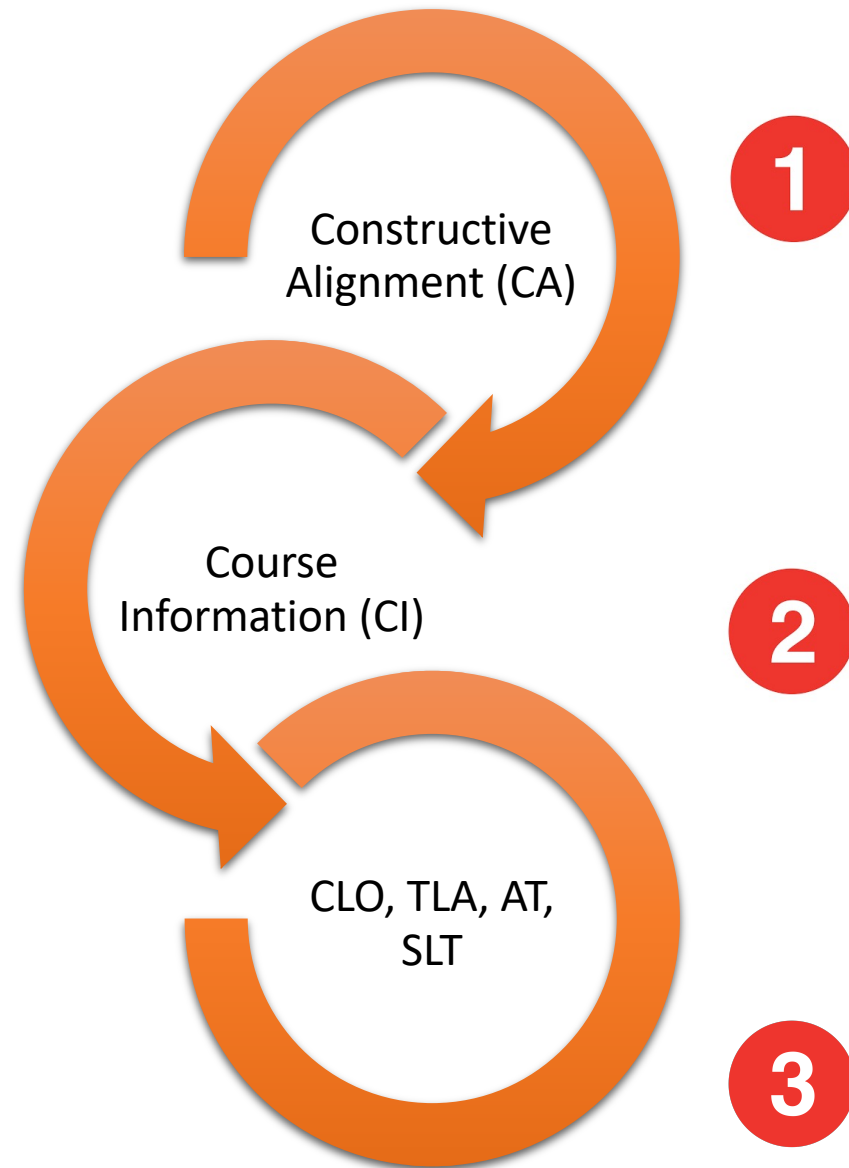
# What would you like to learn specifically in today session?

 Mentimeter

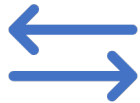


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# Agenda:



**Recap on  
Constructive  
Alignment  
(CA)**



**Recap on  
Course  
Information  
(CI) document**

- 1 CLO
- 2 TLA
- 3 AT
- 4 SLT



**Steps to  
revise, re-  
design for CI  
improvement**



**Hands-on?**

**1**

**Constructive  
Alignment  
(CA)**

Course  
Information (CI)

CLO, TLA, AT, SLT

# [Recall] Constructive Alignment (CA)

1

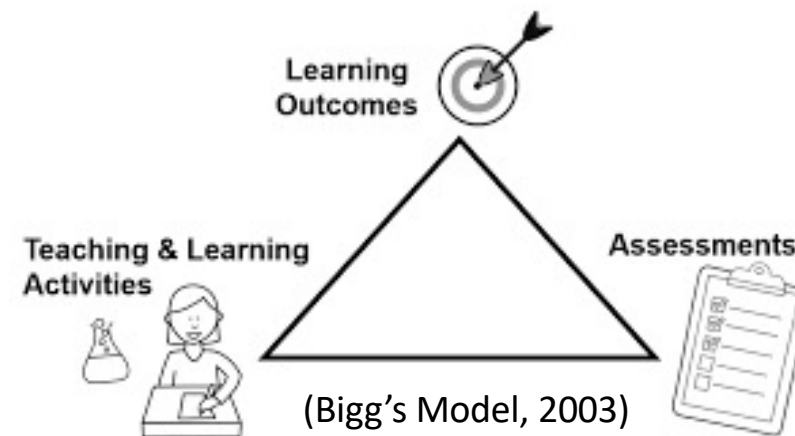
What do we want  
the learners to  
know?

2

How will the  
learners learn?

3

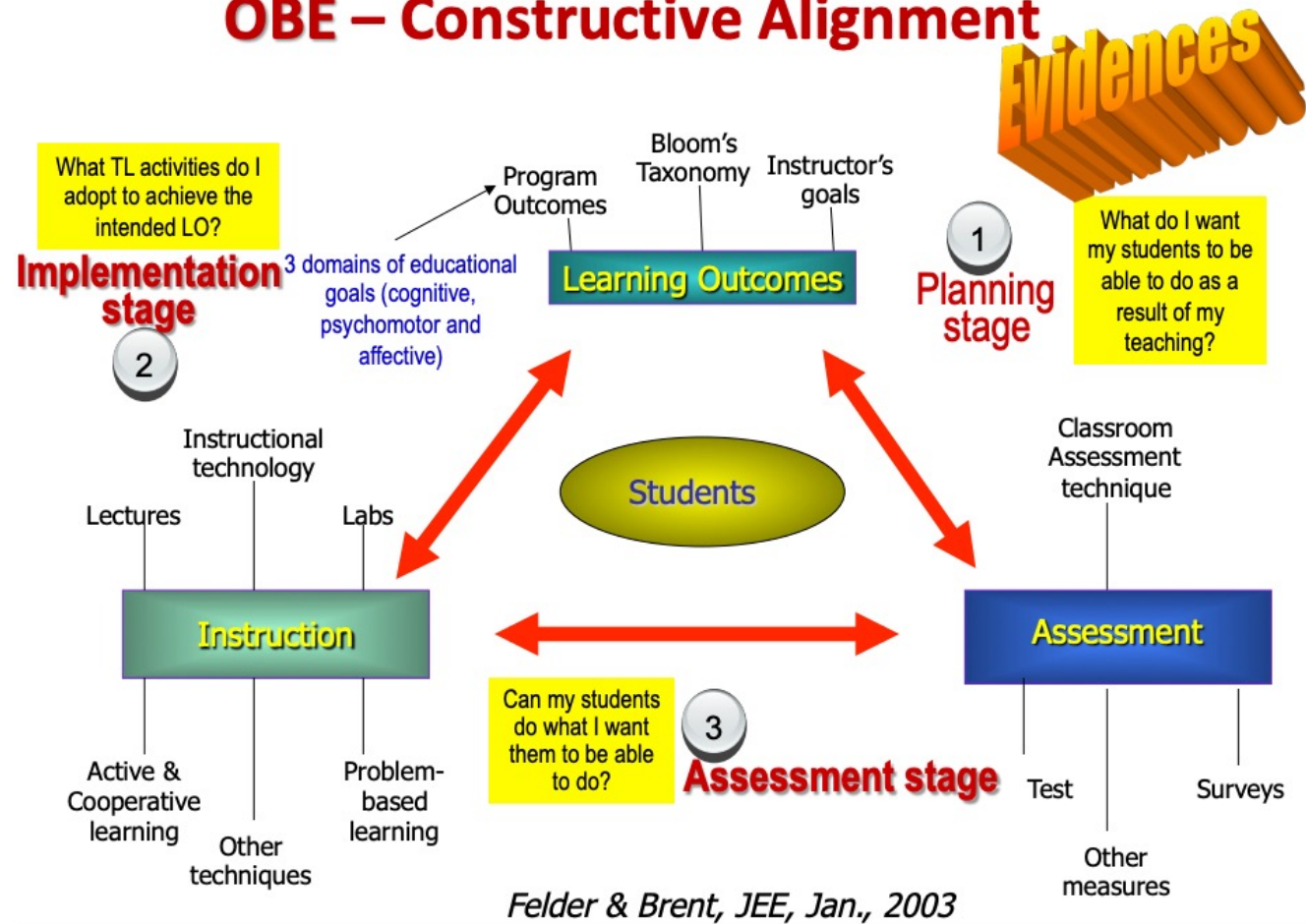
How will we  
know the  
learners have  
learnt?



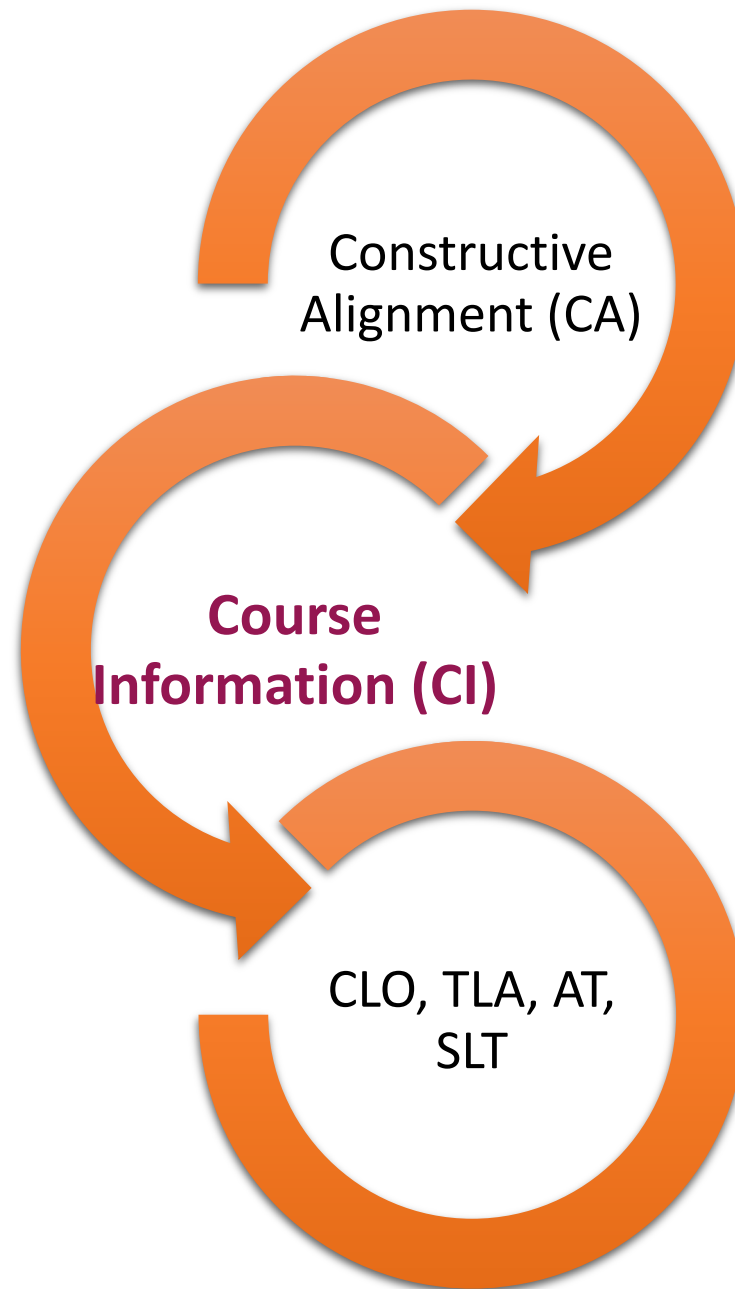


# [Recall] Constructive Alignment (CA)

## OBE – Constructive Alignment



2



**BASELINE COMPETENCIES FOR  
DIFFERENTIATED CAREER PATHWAY  
(BC4DCP) – GROUP 2**



**MODULE 2A : COURSE INFORMATION**

**Assoc. Prof. Dr. Naziha Ahmad Azli**  
**Curriculum Innovation and Development Unit (CIDU)**

[www.utm.my](http://www.utm.my)

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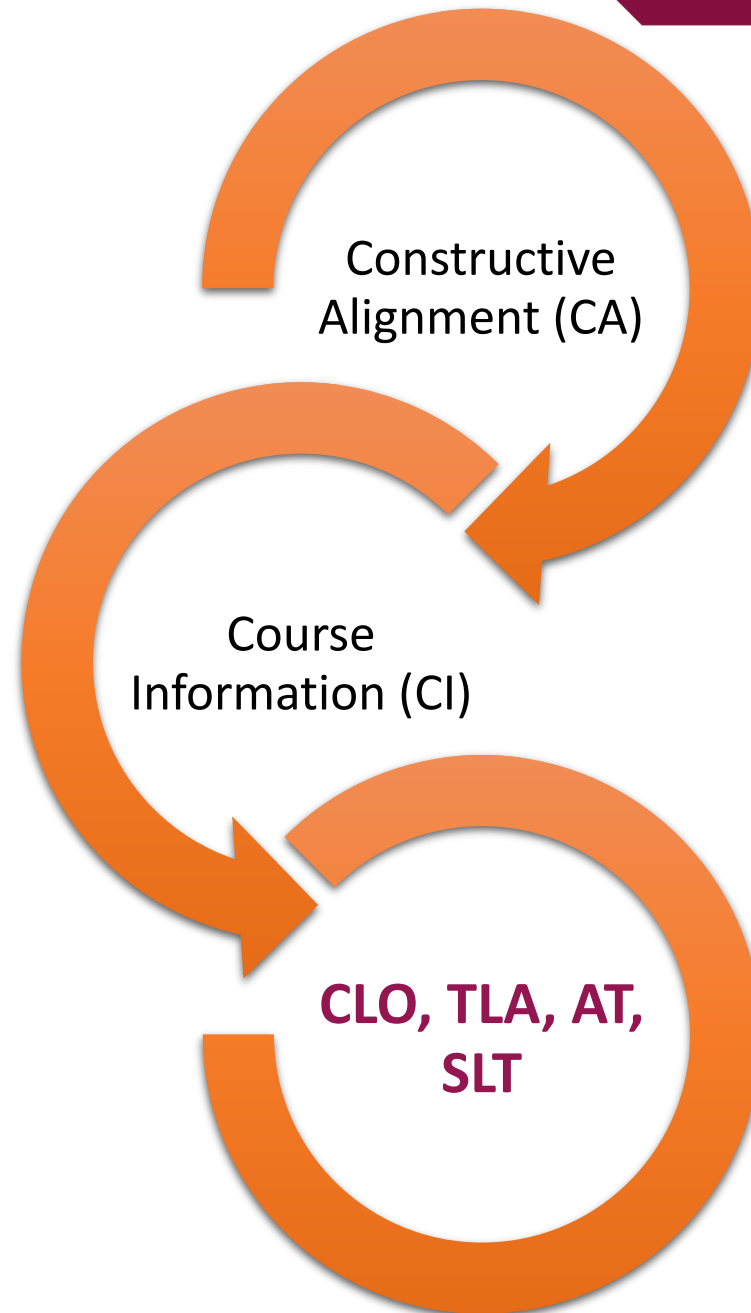
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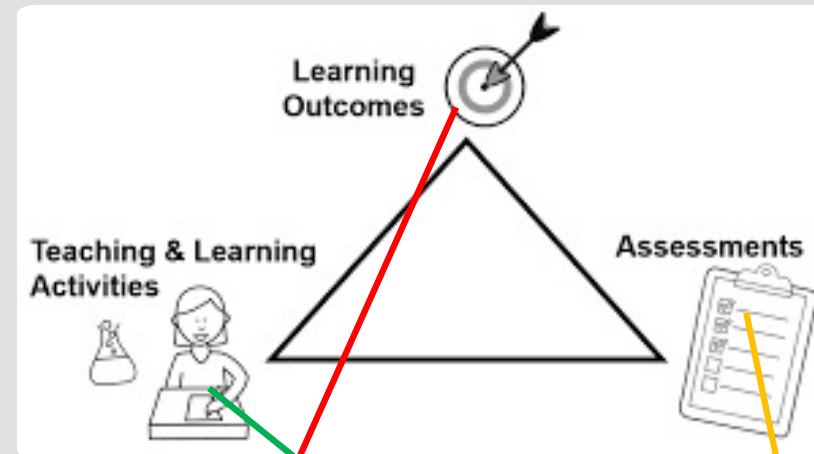
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[https://utmcdex.utm.my/download/course\\_materials/bc4dcp\\_2021/modul\\_2a\\_pm\\_dr\\_naziha/BC4DCP-OBEAdd-2021.pdf](https://utmcdex.utm.my/download/course_materials/bc4dcp_2021/modul_2a_pm_dr_naziha/BC4DCP-OBEAdd-2021.pdf)

**3**



# [Recall] How CA applied in Course Information (CI)



CI SEC J 2613 System Analysis and Design Section 02.05 (Student) 14nov2021

Layout References Mailings Review View QuillBot Grammarly REF-N-WRITE Acrobat Table Design Layout Tell me

Mapping of the Course Learning Outcomes (CLO) to the Programme Learning Outcomes (PLO), Teaching & Learning (T&L) methods and Assessment methods:

No.	1 CLO	PLO (Code)	*Taxonomies and **generic skills	2 T&L methods	3 ***Assessment methods
CLO1	Analyze the concepts of system development life cycle (SDLC) in an information systems project using structured methodology	PLO1 (KW)	C4	KWL chart, Jigsaw-activity, Mind-mapping, In-class problem solving	Mid-Term Exam (10%) Alternative Assessment (10%)
CLO2	Develop hi-fidelity prototype of information system for the real-world case study application using structured methodology.	PLO2 (AP)	C5	Team Discussion Think-Pair-Share, Project - case study	Phase 1 Report (5%) Phase 2 Report (5%) Phase 3 Report (10%)
		PLO3 (PS)	C5		Phase 1 Report (5%) Phase 2 Report (10%) Phase 3 Report (15%) Alternative Assessment (20%)
CLO3	Ability to do work effectively in a team in delivering the SDLC output.	PO7 (TW)	TW1, P3	Collaborative team engagement, Project planning, Self & peers reflection	3 Phases x Peer Assessment (10%)

**4**
**Student learning time (SLT) details:**

Distribution of student Learning Time (SLT) Course content outline					Teaching and Learning Activities		TOTAL SLT
	Guided Learning (Face to Face)				Guided Learning Non-Face to Face	Independent Learning Non-Face to face	
<b>CLO</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>O</b>			
CLO1	17h			2h*	17h	10h	46h
CLO2	21h				19h	20h	60h
CLO3	4h				3h	4h	11h
<b>Total SLT</b>	<b>42h</b>			<b>2h</b>	<b>39h</b>	<b>34h</b>	<b>117</b>

L: Lecture, T: Tutorial, P: Practical, O: Others (\*Test)

Continuous Assessment		PLO	Percentage	Total SLT
1	Team Project	AP	18	As in CLO2, CLO3
		PS	32	
		TW	10	
Final Assessment		PLO	Percentage	Total SLT
1	Mid-Term Exam	KW	15	As in CLO1 (2h)
2	Final Examination	KW	25	3h
<b>Grand Total SLT</b>				<b>120h</b>

# SECD 2613 Scenario

[Redesign & Revision Sample – CLO, TLA, AT, SLT]

# 2019/2020 -01

## Before COVID-19

No.	CLO	PLO (Code)	Taxonomies And generic skills	T&L methods	Assessment methods
<b>CLO1</b>	Apply the concepts of system development life cycle in an information systems project.	PLO1 (KW)	C3	Lecture, Active learning	A (5%) T (10%) F (10%)
<b>CLO2</b>	Design phase based on requirement in real-world case study using structured methodology.	PLO2 (AP) PLO3 (PS) PO7 (TW)	P3 C5 TW1	Lecture, Active learning, Project-based learning	T (10%) F (25%) PR (29%)
<b>CLO3</b>	Demonstrate the prototype design of an information system project.	PO7 (TW)	TW1	Project-based learning	PR (11%)



# 2019/2020 -01

## Before COVID-19

No.	CLO	PLO (Code)	Taxonomies & generic skills	T&L methods	Assessment methods	
CLO1	<b>Apply</b> the concepts of system development life cycle in an information systems project.	PLO1 (KW)	<b>C3</b>	Lecture, Active learning	A (5%) T (10%) F (10%)	} 25%
CLO2	<b>Design</b> phase based on requirement in real-world case study using structured methodology.	PLO2 (AP) PLO3 (PS) PO7 (TW)	P3 <b>C5</b> TW1	Lecture, Active learning, Project-based learning	T (10%) F (25%) PR (29%)	} 64%
CLO3	<b>Demonstrate</b> the <b>prototype</b> design of an information system project.	PO7 (TW)	TW1	Project-based learning	PR (11%)	} 11%

**\* CLO3 – no generic skills mentioned to be assessed**

# 2020/2021 -01

## Year-1 COVID-19

No.	CLO	PLO (Code)	Taxonomies & generic skills	T&L methods	Assessment methods
CLO1	<b>Analyze</b> the concepts of system development life cycle (SDLC) in an information systems project using structured methodology	PLO1 (KW)	<b>C4</b>	<b>Know-Want-Learn (KWL) chart, Jigsaw-activity, Mind-mapping</b>	<b>Mid Term Exam:</b> 15% <b>Final Exam:</b> 25%
CLO2	Develop hi-fidelity prototype of information system for the real-world case study application using structured methodology.	PLO2 (AP)	<b>C5</b>	<b>Group Discussion (GD) Think-Pair-Share (TPS), Project - case study</b>	<b>Project 1 report:</b> 5% <b>Project 2 report:</b> 6% <b>Project 3 report:</b> 7%
		PLO3 (PS)	<b>C5</b>		<b>Project report:</b> 5% <b>Project 2 report:</b> 5% <b>Project 3 report:</b> 10% <b>Project 4 prototype:</b> 12%
CLO3	Ability to do <b>work effectively in a team</b> in delivering the SDLC output.	PO7 (TW)	<b>TW1, P3</b>	<b>Collaborative GD using Trello app, Self &amp; Peers reflection using Teammates app/ Google Form</b>	4 Projects x <b>Peer assessment:</b> 10%

# 2020/2021 -02

## Year-1 COVID-19

No.	CLO	PLO (Code)	*Taxonomies and **generic skills	T&L methods	***Assessment methods	
CLO1	Analyze the concepts of system development life cycle (SDLC) in an information systems project using structured methodology	PLO1 (KW)	C4	Know-Want-Learn (KWL) chart, Jigsaw-activity, Mind-mapping	Mid Term Exam: 15% Final Exam: 25%	} 40%
CLO2	Develop hi-fidelity prototype of information system for the real-world case study application using structured methodology.	PLO2 (AP)	C5	Group Discussion (GD) Think-Pair-Share (TPS), Project - case study	Project 1 report: 5% Project 2 report: 6% Project 3 report: 7%	
		PLO3 (PS)	C5		Project report: 5% Project 2 report: 5% Project 3 report: 10% Project 4 prototype: 12%	
CLO3	Ability to do work effectively in a team in delivering the SDLC output.	PO7 (TW)	TW1, P3	Collaborative GD using Trello app, Self & Peers reflection using Teammates app/ Google Form	4 Projects x Peer assessment: 10%	} 10%

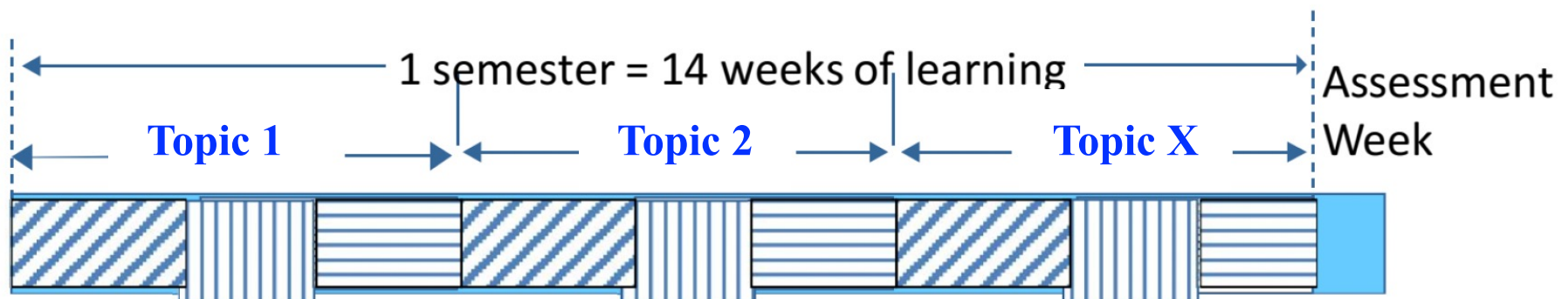
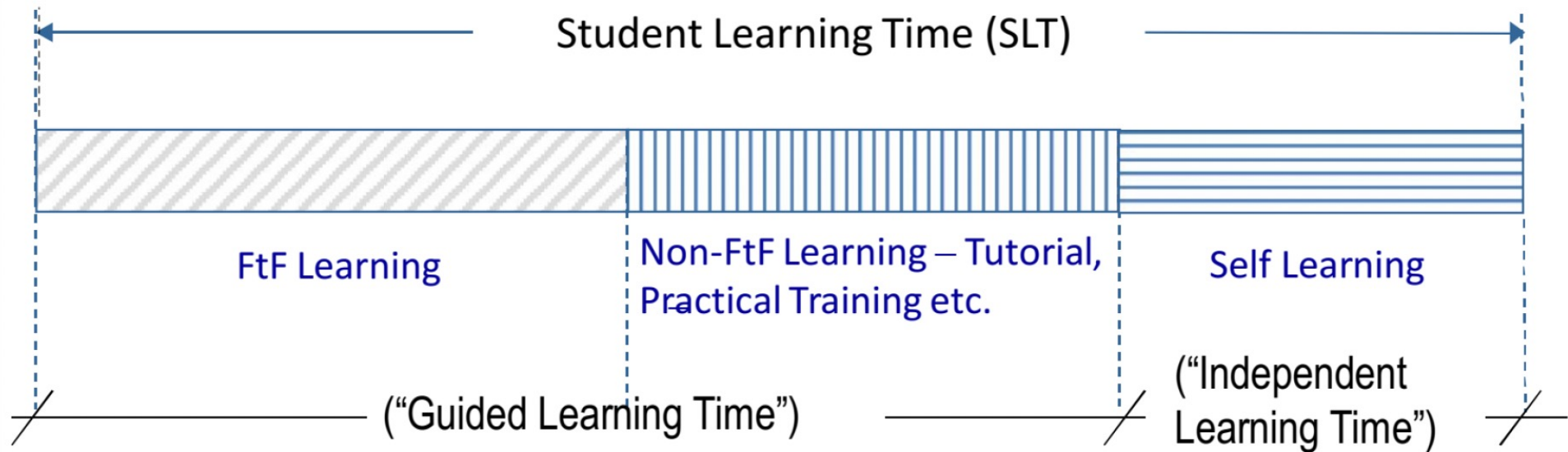
## Before CI revision – 2019/2020-01

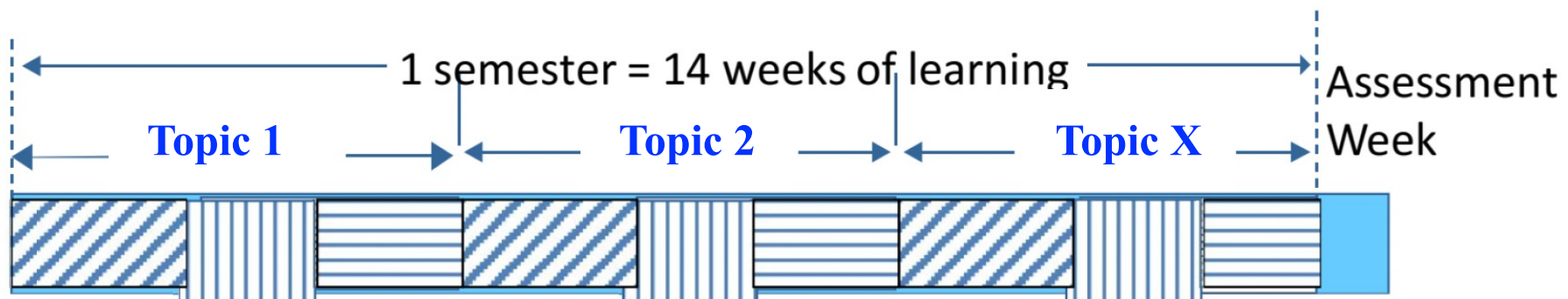
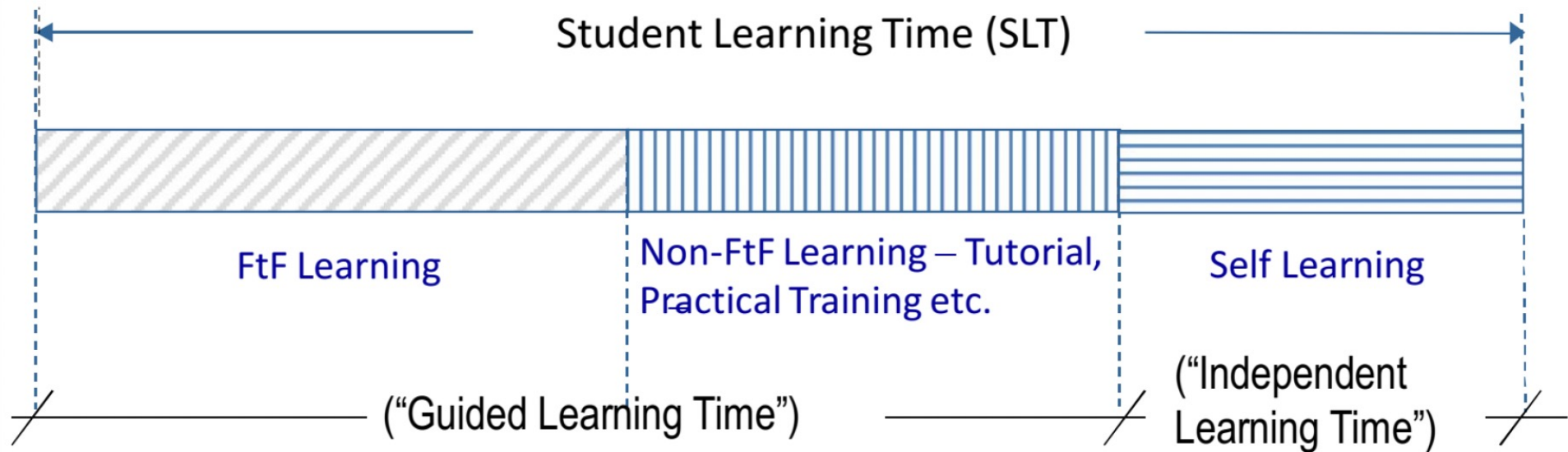
### Student learning time (SLT) details:

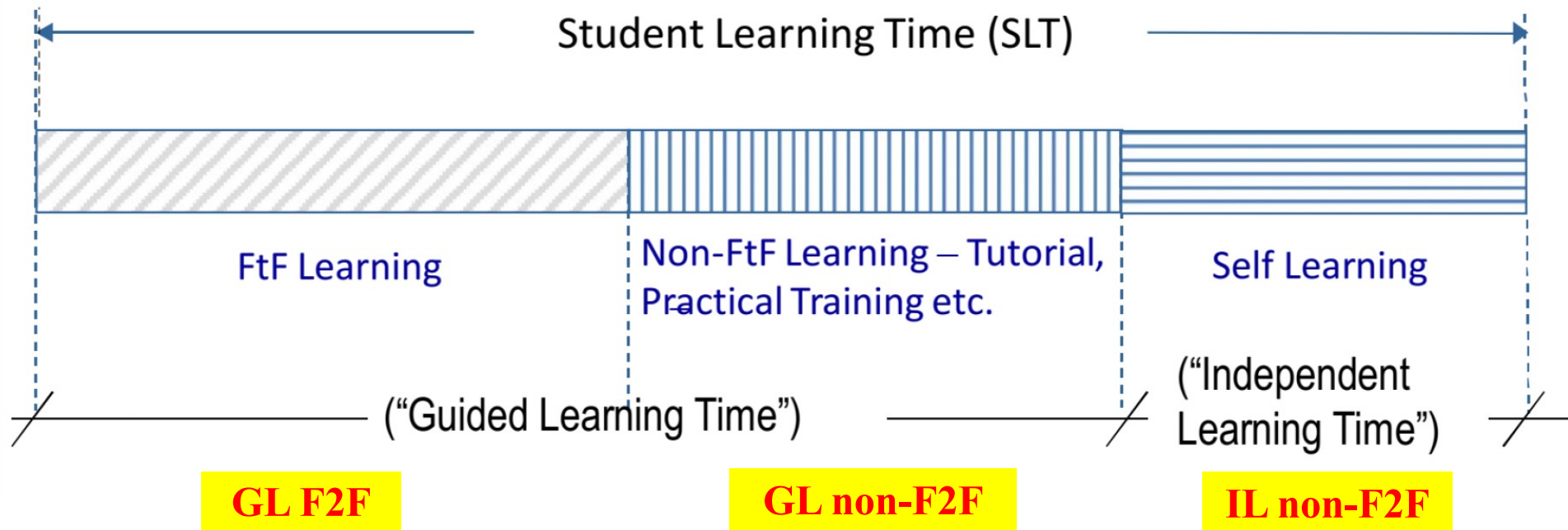
Distribution of student Learning Time (SLT) Course content outline					Teaching and Learning Activities		TOTAL SLT
	Guided Learning (Face to Face)				Guided Learning Non-Face to Face	Independent Learning Non-Face to face	
<b>CLO</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>O</b>			
CLO1	10h					17h	27h
CLO2	13h	4h	5h		7h	29.5h	58.5h
CLO3	3h		7h		3h	15h	28h
<b>Total SLT</b>	<b>26h</b>	<b>4h</b>	<b>12h</b>		<b>10h</b>	<b>61.5h</b>	<b>113.5h</b>

L: Lecture, T: Tutorial, P: Practical, O: Others

Continuous Assessment		PLO	Percentage	Total SLT
1	Quiz	KW	5	1h
2	Mid-Term Exam	KW	10	2h30m
		A	10	
3	Group Project	PS	20	As in CLO3, CLO4
		TW	20	
Final Assessment		PLO	Percentage	Total SLT
1	Final Examination	KW	10	3h
		A	20	
		PS	5	
<b>Grand Total SLT</b>				<b>120h</b>







Guided Learning (Face to Face) – <b>GL F2F</b>			
L	T	P	O

L: Lecture ~F2F lecture, T: Tutorial, P: Practical~amali/lab, O: Others ~formative activities @virtual online class

**Student learning time (SLT) details:**

Distribution of student Learning Time (SLT) Course content outline	Teaching and Learning Activities					TOTAL SLT	
	Guided Learning (Face to Face) – GL F2F				Guided Learning Non-Face to Face – GL nonF2F *eLearning		Independent Learning Non-Face to face – IL nonF2F
CLO	L	T	P	O			
CLO1 – 40%	//0.4*42 = 17h	117 – 42 = 75h  * to be distributed in cells GL F2F (T, P, O) + GL nonF2F + IL nonF2F					// 0.4 x 120 = 48h minus Test 2h ~ 46h
CLO2 – 50%	//0.5 * 42 = 21h						// 0.50 x 120 = 60h
CLO3 – 10%	//0.1 * 42 = 4h						// 0.1 x 120 = 11h
<b>Total SLT</b>	<b>42h</b> //3credit x 14weeks						<b>117h</b>

L: Lecture ~F2F lecture, T: Tutorial, P: Practical ~amali/lab, O: Others ~formative activities @virtual online class

Continuous Assessment //Formative		PLO	Percentage	Total SLT
1	Team Project	AP	18	As in CLO2, CLO3
		PS	32	
		TW	10	
Final Assessment //Summative		PLO	Percentage	Total SLT
1	Mid-Term Exam	KW	15	As in CLO1 (2h)
2	Final Examination	KW	25	3h
<b>Grand Total SLT</b>				<b>120h</b>

} 117 h



**Student learning time (SLT) details:**

Distribution of student Learning Time (SLT) Course content outline	Teaching and Learning Activities					TOTAL SLT	
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} 117 h

**Student learning time (SLT) details:**

1

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} 117 h

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**2**

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**3**

L: Lecture ~F2F lecture, T: Tutorial, P: Practical ~amali/lab, O: Others ~formative activities @virtual online class

Continuous Assessment //Formative		PLO	Percentage	Total SLT
1	Team Project	AP	18	As in CLO2, CLO3
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} 117 h

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4

**Student learning time (SLT) details:**

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<b>Grand Total SLT</b>				<b>120h</b>

}

117 h

## (After) SLT revision

### Student learning time (SLT) details:

Distribution of student Learning Time (SLT) Course content outline					Teaching and Learning Activities		TOTAL SLT
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<b>CLO</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>O</b>			
CLO1	17h			2h*	17h	10h	46h
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2	Final Examination	KW	25	3h
<b>Grand Total SLT</b>				<b>120h</b>

# 2021/2022 -02

## Year-2 COVID-19

No.	CLO	PLO (Code)	*Taxonomies and **generic skills	T&L methods	*** Assessment methods
CLO1	Analyze the concepts of system development life cycle (SDLC) in an information systems project using structured methodology	PLO1 (KW)	C4	KWL chart, Jigsaw-activity, Mind-mapping, In-class problem solving	<b>Mid-Term Exam (10%) Alternative Assessment (10%)</b>
CLO2	Develop hi-fidelity prototype of information system for the real-world case study application using structured methodology.	PLO2 (AP)	C5	Team Discussion Think-Pair-Share, Project - case study	Phase 1 Report (5%) Phase 2 Report (5%) Phase 3 Report (10%)
		PLO3 (PS)	C5		Phase 1 Report (5%) Phase 2 Report (10%) Phase 3 Report (15%) <b>Alternative Assessment (20%)</b>
CLO3	Ability to do work effectively in a team in delivering the SDLC output.	PO7 (TW)	TW1, P3	Collaborative team engagement, Project planning, Self & peers reflection	<b>3 Phases x Peer Assessment (10%)</b>



# Main References

1. UTM CEE, [Tips writing CLO](#)  
(Videos collection - <https://tree.utm.my/blog/videos/> )
2. UTM CDex, [Student Learning Time](#)
3. UTM CDex, [B4DCP Module 2A Course Information](#)

<https://www.youtube.com/watch?v=PjvmMFIA4CY&list=PLI6fRvVdWMPtCXObv3mx9kzHXvRpDktEr&index=13>

[https://utmcdex.utm.my/download-material/course\\_materials/?external=1](https://utmcdex.utm.my/download-material/course_materials/?external=1)

[https://utmcdex.utm.my/download/course\\_materials/bc4dcp\\_2021/modul\\_2a\\_pm\\_dr\\_naziha/BC4DCP-OBEAdd-2021.pdf](https://utmcdex.utm.my/download/course_materials/bc4dcp_2021/modul_2a_pm_dr_naziha/BC4DCP-OBEAdd-2021.pdf)

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# Any last words? Today, I have learnt...

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