

Student Learning Time (SLT)

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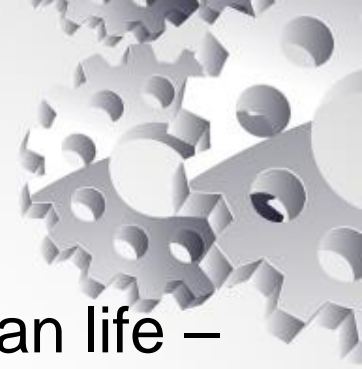
Presentation Outcomes



At the end of the presentation, the participants will be able to:-

- Explain what is Student Learning Time (SLT)
- Explain what is notional hour credit
- Calculate course credit using SLT and notional hour credit

Effective and Quality Time



- Understanding of nominal available time in human life – 2 major components:
 - Time for routine/nature activities, i.e. sleeping, physical exercise, traveling, to maintain a healthy lifestyle, etc
 - Time left to be benefited from or for self improvement, i.e. for work or study
- Could be evaluated on daily, weekly, monthly or yearly basis
- Availability of quality time for self improvement : => Approximately 50 ± 5 hours per week (for a normal or an average person!)

Effective and Quality Time

- Effective Learning Time or Student Academic Load or Learning Volume can be seen from different angles, such as:
 - About 8 hours per day; or 40 working hours per week; or 670 hours study hours for 14 weeks;
 - Nominal of 15~16 credits per semester;
 - Maximum of 22 credits per semester;
 - 1 credit = 40 SLT (per semester);
- Appropriate allocation of SLT reflects in the quality of student's achievement;

STUDENT QUALITY TIME MANAGEMENT AND SLT

Activities	No. of day					Balance	
		(hr/day)		(hr/day)		(hr/week)	
		Low	High	Low	High	Low	High
Total Available Time: 24x7(hrs)						168	168
Sunday off				24	24	144	144
Sleep	6	6	7	36	42	108	102
Sport	6	1	1.5	6	9	102	93
Makan	6	1.5	2	9	12	93	81
Travelling	6	1	1.5	6	9	87	72
Prayer	6	1	1.5	6	9	81	63
Mandi / upkeep	6	1	1.5	6	9	75	54
Socialising	6	1	1.5	6	9	69	45
Wastage	6	1	1	6	6	63	39
(Available quality time)						63	39
Learning Time						51	
Guided Learning	5	8	8	40	40	23	-1
Self Learning / HW, etc	6	2	2	12	12	11	-13
Total Available Time @14w						882	546
Avg (Student taking 15 Credit)	15	x	40	=	600	ok	appropriate
Max (Student taking 22 Credit)	22	x	40	=	880	ok	not ok

Average Quality Time for self improvement

Credit System....Shift

- Traditional:
 - Based on teacher-centered,
 - Measured by staff contact time.



- MQF Credit System:
 - Based on student-centered output-oriented approached,
 - Measured by learning volume by the student.

DEFINITION OF CREDIT & SLT: MQF APPROACH

◆ Teacher-centred approach (traditional):


- e.g. weekly contact time based: 1 hour lecture, or 2 hours tutorial, or 2~3 hours laboratory session defines a credit.

◆ Student-centred output-oriented approach (MQF):

- e.g. valuing the student effort. A notional value of 40 hours effort (learning time) for a credit. It is a nominal effort of an average achiever in a semester of 14 weeks (delivery) duration. It includes all the learning components or learning activities (attending the formal instruction (guided) and independent study).

DEFINITION OF CREDIT:

“OLD” APPROACH

- Teacher-centred approach (traditional):
 - e.g. weekly contact time based:
 - 1 hour lecture = 1 CREDIT
 - 2 hours tutorial = 1 CREDIT
 - 2~3 hours laboratory = 1 CREDIT
- 

DEFINITION OF CREDIT & SLT: MQF APPROACH



- Student-centred output-oriented approach (MQF):
 - valuing the student effort.
 - A notional value of 40 hours effort (learning time) for a credit.
 - a nominal effort of an average achiever in a semester of 14 weeks (delivery) duration.
 - includes all the learning components or learning activities (attending the formal instruction (guided) and independent study).
- Credit = Total SLT ÷ 40**



Credit and Academic Load

19. Credit is the quantitative measure that represents the volume of learning or academic load to attain the set learning outcomes.¹

20. Academic load is a quantitative measure of all learning activities required to achieve a defined set of learning outcomes. These activities include lecture, tutorial, seminar, practical, self-study, retrieval of information, research, fieldwork, as well as preparing for and sitting of an examination. In Malaysia, 40 hours of notional student learning time is valued as one credit.²

What is Student Learning Time (SLT) ?

- Effective learning time or student effort in learning or the learning volume (**a quantitative measurement of ALL learning activities**), in order to achieve the specified learning outcomes:-
- **include lecture, tutorial, seminar, practical, self-study, retrieval of information, research, fieldwork, as well as preparing for and sitting of an examination.**
- i.e. Official Contact Time + Guided Learning Time + Self Study Time (Independent learning) + Assessment Time.

MATRIKS KURSUS LAWAN JAM PEMBELAJARAN PELAJAR (SLT)

- Contoh JPP seperti dalam jadual di bawah.
- Contoh: Matrik Jam Pembelajaran Pelajar (JPP) (Student Learning Time - SLT).
- Pengiraan JPP adalah seperti dalam Para 1.6.1.
- Pengiraan perlu mengambil kira semua aktiviti pembelajaran dan pengajaran sesuatu kursus
- Contoh: Jumlah Jam Pembelajaran Pelajar (JPP) Mengikuti Aktiviti Pengajaran– Pembelajaran seperti dalam Lampiran 3.8.

Bil	Kod Kursus	Nama Kursus	Kredit	Pembelajaran Bersemuka (PB)			Aktiviti Pembelajaran Kendiri			Penilaian Formal		Jumlah JPP
				Pembelajaran Berpusatkan Pensyarah	Pembelajaran Berpusatkan Pelajar		Pembelajaran Tak Bersemuka (PTB) atau SCL spt. manual, tugas, modul, dll.	Ulangkaji	Persediaan Penilaian	Penilaian Berterusan	Peperiksaan Akhir	
					Syarahan	Amali/Tutorial						
KURSUS UNIVERSITI												
KURSUS TERAS												
KURSUS ELEKTIF												
Jumlah JPP												
i. Kursus Universiti												} 7 Jam
ii. Kursus Teras												
iii. Kursus Elektif												
Kredit Notional												$7 / 40 = 7$ (minimum 120)

Why notional 40 hours Student Learning Time (SLT) for a credit?



- MQF Credit System (Notional Credit Hour Concept):
 - The Student academic load is the **learning effort** or volume of learning an “**average student**” must undertake to achieve a defined group of learning outcomes.
 - It represents all forms of learning in hours, whether lecture-based, tutorial, work-based, research, experiential, practical activities, private study, preparation for assessment or whatever that is required of an average student **to achieve a specified set of learning outcomes**.
 - It does not simply relate to formal teaching but the “knowledge currency”, hence the concept of notional credit hour.

Why notional 40 hours Student Learning Time (SLT) for a credit?



- If a course have only 1 hour lecture per week per 14 weeks (and no other TLA and no assessments);
- a student is expected to spend about 2 hours additional for every 1 hour lecture -a nominal effort of an average achiever in a semester of 14 weeks (delivery) duration.
- Thus a total of 42 hours SLT $[(1+2) \times 14]$ for a credit in a semester – (round-down = 40)
- In England, Wales and Northern Ireland as well as in New Zealand, one credit is equivalent to 10 hours of notional learning time. The European Qualifications Framework equates one credit with 25-30 hours of notional learning time.

Student Learning Time / Jam Belajar Pelajar

Is a measure of the learning effort or volume of learning a student must undertake to achieve a defined group of learning outcomes

All forms of learning in hours includes contact hours, work-based, research, experiential, practical activities, private study, preparation for assessment etc

Malaysian Currency = 40 "Notional" hours = 1 Credit

UK Currency = 10 "Notional" hours = 1 Credit

Example: BTA2123

Learning Activity	Week	No. of hrs /week	M'sia	UK
			hrs / sem	
Lecture	14	3	42	42
Tutorial	14	1	14	14
Practical / Lab	14	0	0	0
Independent	14	2	28	28
Others				0
1. Project	2 PROJECTS		30	30
2. Industry Visits	(2 VISITS)		10	10
Total Student Learning Time (SLT)			124	124
			divide by	
Notional hours			40	10
Credit			3.1	12.4

WHY SLT?

- Management instrument for both the guided and independent learning;
- A component of time management - SLT promotes ethics and discipline in student's effort towards learning;
- Enhancing the skills of “Life-Long-Learning”;
- An indicator of effort in learning & study smart;
- Educate on how the “learning by doing” in respect to effort in learning, i.e. student-centered output-oriented approach;
- Effective control of prescribed study duration.

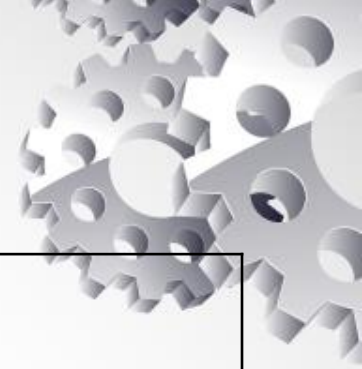
» ***SLT is an effective time management tool***



22. The benefit of the credit system is the enhancement of the higher education provider's autonomy to design and plan the teaching and learning activities that are no longer bound to contact hours based on total teaching weeks in a semester. Hence, this system supports the varieties in the national education system, which is characterised by the difference periods of semesters between universities, colleges, polytechnics, and community colleges, and between public and private sectors. The credit system also supports the varied mode of delivery, namely full-time, part-time, weekend, distant learning, e-learning, and also non-structured learning in the informal and non-formal sectors. This system also ensures that student academic load is distributed evenly in an academic calendar.

Teaching and Learning Activities	Implementation Time	Additional Time Preparation Time/ Time for Self Study	Note
LECTURE	1 hr.	1-2 hr.	Complex courses might need 3 hours or more preparation time for one hour lecture.
TUTORIAL	1-2 hr.	1-2 hr	
MAKMAL	3 hr. + report	- none -	For particular disciplines, 3 hours of lab might need additional 2-3 hours to prepare the report.
FINAL YEAR PROJECT	240 - 400 hr.	- none -	
SMALL GROUP DISCUSSION	1-2 hr.	1 hr.	
PROBLEM-BASED LEARNING (PBL)	2 hrs.	2-3 hrs + 2 hrs for discussion	
eLEARNING	- none-	3 hr.	No Face-to-face
PRESENTATION	1 hr.	2-3 hr.	
CREATIVE WRITING	100-150 pages novel 50-70 pages of script	8-10 hrs/day throughout the whole semester	8 hrs. X 5 days X 14 weeks = 560 hrs.
CASE ANALYSIS/STUDY	3 hrs per case	- none -	
ASSIGNMENT (2000 words)	- none -	10-12 hr.	
SUMMATIVE ASSESSMENT	3 hrs	3 hrs. preparation	Complex courses might need more preparation time for one hour of assessment.

EXAMPLE



	TLA	Assessment
CLO1	10 Lect, 4 Tut, 2 Lab	Test 1 (30 mins), Assignment 1 (500 words), Final Exam (2 hrs)
CLO2	4 Lect, 2 Tut	Test 2 (30 mins), Final Exam (2 hrs)
CLO3	12 Lect, 6 Tut, 3 Lab	Test 3 (60 mins), Assignment 2 (1000 words), Final Exam (2 hrs)

EXAMPLE



	TLA	F2F	NF2F	Total	Assessment	F2F	NF2F	Total
CLO1	10 Lect, 4 Tut, 2 Lab	10	20	30	Test 1 (30 mins), Assignment 1 (500 words), Final Exam (2 hrs)	0.5	1.5	2
		4	4	8		0	3	3
		2	0	2		2	6	8
CLO2	4 Lect, 2 Tut	4	8	12	Test 2 (30 mins), Final Exam (2 hrs)	0.5	1.5	2
		2	2	4				
CLO3	12 Lect, 6 Tut, 3 Lab	12	24	36	Test 3 (60 mins), Assignment 2 (1000 words), Final Exam (2 hrs)	1	3	4
		6	6	12		0	6	6
		3	0	3				
Sub-Total		43	64	107		4	21	25
Total SLT		132			Credit	$132 \div 40 = 3.3 = \mathbf{3}$		

Issues?

- Must we “hit” the exact value of SLT?
- i.e. If 3 credit, do we have to have 120 hours of SLT?
- Or, can we exceed the “limit”? (e.g. 124)
- Or, can we NOT achieve the value? (e.g. 110)



Student Learning Time / Jam Belajar Pelajar

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Independent	14	2	28	28
Others				0
1. Project	2 PROJECTS		30	30
2. Industry Visits	(2 VISITS)		10	10
Total Student Learning Time (SLT)			124	124
			divide by	
Notional hours			40	10
Credit			3.1	12.4

Issues?



- If we can exceed the “limit”, how much “more” can we exceed?
 - 10% of SLT of the credit
 - i.e. 40-44, 80-88, 120-132, etc, etc
 - 0 – 12 hours more than the SLT for the credit
 - i.e. 40-52, 80-92, 120 – 132, etc, etc

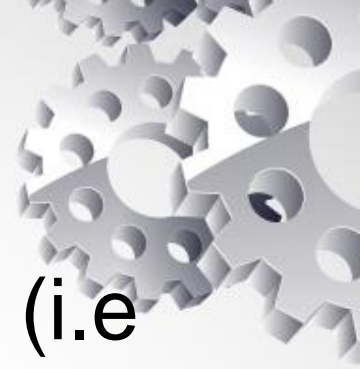
Issues?

- Do we have to include the time for “final exam” ?



Issues?

- How do we know what assessments (i.e. continuous, formative and summative assessments) to have for a course?



Assessment Types	Usage	Examples of Assessment
Formative	<ul style="list-style-type: none"> • Used to improve student attainment • To give feedbacks on students' learning progress • DOES NOT usually form part of a summative grade or mark 	Tests, Quizzes, Homework, True-False Tests
Continuous	<ul style="list-style-type: none"> • Used when learning outcomes need to be achieved at various stages of a module/subject/course • Used to lessen the burden of summative assessment 	- Depends on which CLO is being assessed, Bloom's Level, and PLO to be achieved
Summative	<ul style="list-style-type: none"> • Used to demonstrate competence • Used to evaluate or make judgment of the merit or value of the course • Usually contributes to final grade in a course, module, or level 	-To assess the overall achievement of CLOs, Bloom's level, and PLOs. - Depends on the CLOs and the PLOs to be achieved

What to assess?



	Learning Outcome (LO)	Teaching and Learning Strategy	Assessment Strategy
PLO1	Knowledge/understanding;	Lecture, Tutorial	Written Tests, Quiz
PLO2	Cognitive skills	Lecture, Tutorial	Written Tests, Quiz
PLO3	Practical skills;	Case Study, Project, Tutorial, Group Work Practical, Demonstration	Practical Tests
PLO4	Interpersonal & Communication Skills	Case Study, Project, Tutorial,	Presentation
PLO5	Digital & Numeracy Skills	Case Study, Project, Tutorial, Group Work	Presentation, Project,
PLO6	Leadership, Autonomy & Responsibility	Case Study, Project, Group Work, Discussion	Project, Industrial Attachment
PLO7	Personal & Entrepreneurial Skills	Case Study, Project, Group Work	Project, Portfolio, Industrial Attachment
PLO8	Ethics & Professionalism	Case Study, Project, Tutorial, Discussion	Written, Presentation, Project

Outcomes-Based Assessment



- In Outcomes-Based Assessment (OBA), the assessment methods should be **constructively aligned** with the achievement of the LOs.
- The assessment methods should also support the learners in their **learning progress (formative assessment)** and **validate their achievement of the LOs at the end of the process (summative assessment)**.
- For example, if the LO is to be able to give an **explanation** about energy conservation in thermodynamic processes, then the assessment methods and **tasks chosen must involve the students providing explanations about energy conservation in thermodynamic processes.**

Issues?

- How do we justify the percentages that we give for each assessments (i.e continuous and summative assessments) in our courses?

- e.g. :

Assignment	-	10%
Test 1	-	10%
Test 2	-	10%
Presentation	-	10%
Final Exam	-	60%

Weighting



- The weighting of assessment tasks **must be proportionate to the emphasis in the CLOs, the learning activities/tasks and the importance of the contents to the CLO attainment.**
- Assessment comprise of graded continuous assessment tasks (assignments/ quizzes/tests/midterm assessment , etc.) and **may include final graded assessments.**
- The weighting must adhere to the stated assessment weighting **for the course** as approved by an academic committee.

Assignment	10%
Pract Test 1	15%
Pract Test 2	15%
Final Exam	60%

GUT
FEELING???!!!!



JUSTIFICATION METHOD EXAMPLE

CLO	Teaching & Learning	F2F+ NF2F	Assessment		
CLO1	Lecture	14+28=42	Exam	42/126 = 0.33	30%
CLO2	Tutorial	28+28=56	Essay	56/126 = 0.44	50%
CLO3	Practical	28+0 =28	Pract.Test	28/126 = 0.22	20%
Total		126			