

The Credit Hour System As Adapted by the University of Gezira: Special Reference to Medical Faculties

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1. Historical Background:

The University of Gezira was established in 1975. The first Batch of students registered for their first semester in September 1978. There were four Faculties at that time: Agricultural Sciences, Economics & Rural Development, Medicine and Science & Technology (Presently Engineering & Technology). There were about 50 students in each Faculty. The teaching was in English.

The pioneers opted for a modified American System rather than having a carbon copy of the University of Khartoum with its well established British System. They chose the Credit Hour System adapted to Sudanese environment.

2. The Credit Hour System:

In traditional evaluation system results of students in various courses subjects are stated as; fail, pass, credit, distinction. Such statements of results do not indicate the size of those courses- subjects in hours or weeks and hence do not reflect the student's achievements correctly. The credit hour system aims at coupling the grade obtained with the actual time spent at learning that subject- course and hence the grade has a definite meaning e.g.

Course 0346: 3 credit hours: Grade A.

Course 0347: 14 credit hours: Grade A

It is quite clear that the A obtained in course 0347 was more difficult and the student spent a longer time in learning than course 0346.

The credit hour system measures the quantity of the course or subject. It does not reflect on how difficult or easy the subject is, only indicates how long does it take the student to learn the subject course. At the time of planning the difficulty of the

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subject should be considered; difficult subjects should have longer time than easy subjects- more credit hours.

As the name suggests, the system is based on the Credit Hour, which is defined as: "one contact hour (theory) or two contact hours (practical) per week for 15 weeks". The definition is based on a semester of 15 weeks which is the normal length of the semester in the American System. However the contact hours (theory & practical) can easily be converted to credit hours for any length of semester or for any "Block" within the Semester:

1 Credit Hours	= 15 contact hours of theory
	= 30 contact hours of practical
(For Field Work, training)	= 45 contact hours of Field work
and may be	= 60 contact hours of training

The Medical Faculties in University of Gezira used weeks:

A 2 credit hour course (all theory) may be completed in two weeks at the rate of 3 hours per day for five days per week. ($3 \times 5 \times 2 = 30$ contact hours) Such a course may even be done in one week at the rate of 5 hours per day for six days per week ($5 \times 6 = 30$ contact hours).

3. Adaptation to Sudanese Environment:

The newly born University of Gezira was not in a position in 1978 to adopt the full fledged Credit Hour System. In that system the courses are categorized as:

- ❖ Major, Minor and Elective courses.
- ❖ The Students register for any number of Credit Hours when offered within a specified minimum and maximum load. Above average students accumulate the required credit hours in less years while below average students take a longer time. Each student selects the pace suitable to his ability or circumstances.

Due to limited resources in the University of Gezira, students progress in full Batches, with compulsory set of courses for each semester with a predetermined sum of credit hours. However there is room for withdrawal from the semester or dropping a course if the academic advisor recommends the withdrawal or the drop.

4. The Grading System:

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The letter Grading A, B, C, D, F was used instead of the flat Pass/Fail scale. There are many advantages of the letter grading for example two students had the following grades:

	English	Sociology	Mathematics	Physics
Student X	A	A	C	C
Student Y	C	C	A	A

In the Pass/Fail System one cannot distinguish between Student X and Student Y because each will have the same "P" in all courses:

	English	Sociology	Mathematics	Physics
Student X	P	P	P	P
Student Y	P	P	P	P

The Pass/Fail System does not give any room for analyzing student's performance. The letter grading shows that student X is quite different from student Y in terms of ability in the Mathematical field and in the language.

5. The Odd Grade:

The letter grading system is self checking. When the grades of a student are all put together, any inconsistency will come out very clear. Here are some real examples: a student had an F among A's & B+

Course	1	2	3	4	5
Grade	A	B+	F	B+	A

The F grade looked very odd for such a good student. What made it look extremely odd when it was known that he was the top student and the only First Class student (in 85 students). There is also the odd grade in the sense that A among D's & C's:

Course	1	2	3	4	5
Grade	D	A	D	C	C

The grade A looked rather odd. When these cases were studied the results were very

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interesting: some were a result of mistakes. Some reflected the state of the students **health** physically and mentally when he took the examination.

Another example from 1985 when a student grade in one of the courses appeared as an "F" among A_s & B_s in other courses. The odd "F" grade was noted and the Faculty concerned was asked to revise the student's odd grade. A letter was sent to Senate by the instructor pointing out that "it was entirely his mistake!". The student actually scored one of the top marks in the course. The student CGPA was 3.24 (Upper second).

6. The Grade Point Average (GPA):

The progress of a student from semester to semester is governed by his GPA. The GPA is calculated by dividing the total points by the total credit hours. Each grade is given points as follows:

Grade	A	B+	B	C+	C	D+	D	F
Points	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.0

For example a student who scores scored the following grades in the five courses taken by him.

Course No.	I	II	III	IV	V
Grade hours	3	4	2	6	5
Grade	C	B+	C+	B	A

Points:

Course I 3 x 2 = 6 points

Course II 4 x 3.5 = 14 point

Course III 2 x 2.5 = 5 points

Course IV 6 x 3 = 18 points

Course V 5 x 4 = 20 points

Total points = 63

Total Credit hours = 3 + 4 + 2 + 6 + 5 = 20

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$$GPA = \frac{63}{20} = 3.15$$

A student has to keep a CGPA of equal to or more than 2.00 throughout. The cumulative GPA is the sum of points the student has gained at any point in time divided by the total Credit hours he accumulated.

The previous example, if the student gains in the following semester 37 points from 20 credit hours his CGPA will be:

$$CGPA = \frac{63 + 37}{20 + 20} = \frac{100}{40} = 2.50$$

If in the third semester he scores only 20 points from say 22 credit hours his CGPA will be less than 2.00:

$$CGPA = \frac{100 + 20}{40 + 22} = \frac{120}{62} = 1.94$$

The student will then be put on probation. If he does not succeed in pulling up his CGPA to 2.00 in the following semester he is put on strict probation for a second semester. If he fails to bring his CGPA to 2.00 after the second probation a student is dismissed from the University.

7. The Cumulative Grades Point Average Thermometer:

The CGPA is a very good thermometer for students performance. The Academic Advisor should follow closely the CGPA of his advisee from semester to semester.

Steady	Improving	Deteriorating	Deteriorating	Seriously
Sem 1	2.60	1.87	3.10	2.50
2	2.50	2.21	2.80	2.00
3	2.55	2.55	2.40	1.60

The steady student is consistent and solid. The Improving student is promising and may have more potentials than the steady student. The deteriorating student needs

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advice and he may face problems in senior semesters. The last student case is very serious and needs very close supervision and advice to avoid dismissal.

8. The Distribution of Grades in Courses:

The comparison of percentage of students scoring B+ & A and also the percentage of students scoring less than C sheds light on the courses. Questions are raised when either exceeds 30% .

Percentage of students scoring each grade:

Course	A	B+	B	C+	C	D+	D	F
I	10	12	20	22	20	6	5	5
II	18	22	20	22	18	0	0	0
III	6	8	16	20	15	14	12	9
IV	12	13	22	23	20	4	3	2
V	11	15	20	22	18	6	4	4

Course II and III raise question marks??

The 40% A & B+ in course II raise the following questions:

Was the examination too easy?

Was the teaching extremely good?

Was the instructor's ability & experience highly above average?

Did the students like the instructor's and the material of the course?

Was the course very interesting?

Was the background of the students solid for this course?

In the case of course III with 35% of students scoring less than the C grade: Difficult exam? Poor teaching? Tough course? Weak background?

The pass/fail system may show the poor performance but it will definitely fail to pick out the good performance in course II. It will show that all students passed, which is normal.

9. The Incomplete Grade (I):

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The "I" grade is given for students who attend 75% of the course but do not complete the course and sit for the final examination for acceptable reasons. These reasons could be medical, social and may be financial. The important point is that the Academic Advisor is the one who recommends the "Incomplete" case.

Unfortunately, students misuse the "Incomplete". They use it to avoid taking the examination and seek a "Medical Report". I have always stated that the recommendations of the Academic Advisor is essential even when a student presents a "medical report".

10. The Withdrawal Grade (W):

Students generally refrain from withdrawing from a semester stating that they do not want to fall behind their "Batch"! In many cases, especially for students with low academic standing, the proper decision is to withdraw, take time to improve the academic standing and then rejoin with better chances for continuation in the University. Withdrawal may be the proper thing to do even for health reasons, social or family reasons and may be for financial reasons.

11. Semester One:

The performance of students in semester one generally dose not indicate the ability of the student. Students coming for the first time to a new environment, with quite a change from secondary education to University level education. By the time they settle down, find their where a bouts, know each other, find new friends, they find themselves facing exams. I conclude this paper by two examples from Batch I who started classes on Saturday 30 September 1978.

Student I grades in semester One were:

English	Chemistry	Botany	Zoology	Math	Physics
F	F	D	D	C	C

Grade Point Average (GPA) < 2.00

"First Probation"

This student got out of probation in semester two and graduated with CGPA > 3.4 (Upper Second).

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Today a Ph.D holder and academic staff member, University of Gezira.

Student II grades in semester **One** were:

English	Chemistry	Math I	Math II	Physics
F	F	D	C	C

GPA in Semester One < 2.00

"First Probation"

This student got out of probation in semester two, graduated with a CGPA > 3.4
"Upper Second"

Today a Ph.D holder, Design Engineer, INTEL, Silicon Valley, California, USA.

12. System Requirements:

- 12.1 Efficient Academic Advisory System.
- 12.2 Appropriate students/staff ratio, ideally 10-15.
- 12.3 Full time academic staff & well paid.
- 12.4 Adequate facilities : Lecture rooms, labs., transport, teaching aids & materials.

13. Problems:

- 13.1 Deficiencies in the system requirements especially the Academic Advisory System. This leads to many students falling into academic problems e.g.
 - ❖ weak students taking too many Credit Hours.
 - ❖ weak students carry on with their batch instead of withdrawing to improve their academic standing.
- 13.2 Students are taken in Batches and they carry on to graduate in the same time span. Weak students have to drag on with above average students and some of them fail on the way and they are dismissed. The Batch system is an adaptation forced by the lack of facilities needed for a full swing Credit Hour System.
- 13.3 The Academic Regulations are not easy to be fully understood by students and may be some staff members.
- 13.4 Keeping a cumulative grade point average (CGPA) of 2.00 to continue in the University. This requires sometimes from an average student

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to achieve above average grades to compensate for below average grades in previous semesters which may be far fetched. For example: if a student has an "F" in one course and "C" grades in all other courses, he has to correct the "F" with an "A" or two "B" grades in two courses having the same credit hours as the course in which he got an "F". It is suggested that this needs to be revised. Such a revision is under discussion by Faculties at present.

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