

UMS

Awarding Modular GCE Qualifications from 2010

INTRODUCTION

UMS stands for Uniform Mark Scale. The Uniform Mark Scale is used to convert candidates' component 'raw' marks into uniform marks. This is done in order to standardise marks from year to year. For example, a candidate who just achieves a grade A in a unit one year will receive the same uniform mark as a candidate achieving that same level the following year, regardless of their raw marks.

THE CONVERSION PROCESS

Raw Marks to Grades

Following the marking of scripts, a committee of senior examiners reviews the quality of the work submitted for each individual unit. Using their professional judgement, and statistical and technical evidence, they decide where to set the raw mark grade boundaries for each unit. Table 1 shows possible raw mark grade boundaries for selected units.

Table 1

Unit	Maximum Raw Mark	Raw mark boundaries						
		A*	A	B	C	D	E	N
6CR01	60	-	45	38	31	25	19	13
6CR02	80	-	69	58	47	37	27	17
6CR03	60	53	48	43	38	33	28	23
6CR04	80	75	71	60	49	39	29	19

The table shows that the minimum raw mark required to obtain each grade can vary between units, even when they are marked out of the same total. It should be noted that (i) N will not be published as a grade at any level and (ii) A* will not be published as a grade at unit level; both are only used in the conversion of raw marks to uniform marks.

Raw Marks to Uniform Marks

The raw mark grade boundaries and all the candidates' raw marks are entered into Edexcel's computer. The computer converts the raw marks into uniform marks.

A whole 4 unit A Level is out of 400 uniform marks¹. These uniform marks are divided between the contributing units in a manner that reflects their weighting. For example, unit 6CR01 contributes 20% of the A Level and so is out of 20% of the 400 uniform marks, namely 80 uniform marks.

A whole 2 unit AS level is out of 200 uniform marks. The maximum uniform mark available in any unit remains the same when contributing to an AS level award or an A Level award.

The uniform grade boundaries for each unit are fixed and are shown in Table 2.

¹ A 2 unit award has 200 uniform marks; a 6 unit award has 600 uniform marks; a 9 unit award has 900 uniform marks; and a 12 unit award has 1200 uniform marks.

Table 2

Unit and percentage contribution		Maximum UMS	Uniform Mark Boundaries						
			A*	A	B	C	D	E	N
6CR01	20%	80	-	64	56	48	40	32	24
6CR02	30%	120	-	96	84	72	60	48	36
6CR03	20%	80	72	64	56	48	40	32	24
6CR04	30%	120	108	96	84	72	60	48	36

It is important to note that the scaling is not a single linear scale of maximum raw mark to maximum uniform mark. This is because the intervals between consecutive raw mark grade boundaries are not necessarily constant, however they are fixed for the uniform marks.

In unit 6CR01, all candidates who obtain raw marks of 45 or more receive 64 or more uniform marks, up to a maximum of 80 uniform marks. Those scoring raw marks of 38-44 receive 56-63 uniform marks and so on.

The Conversion to Uniform Marks in AS units Illustrated

The conversion below uses the AS unit 6CR01 as an example. Table 3 shows the raw marks and the uniform marks. These marks have been taken from Table 1 and Table 2.

Table 3

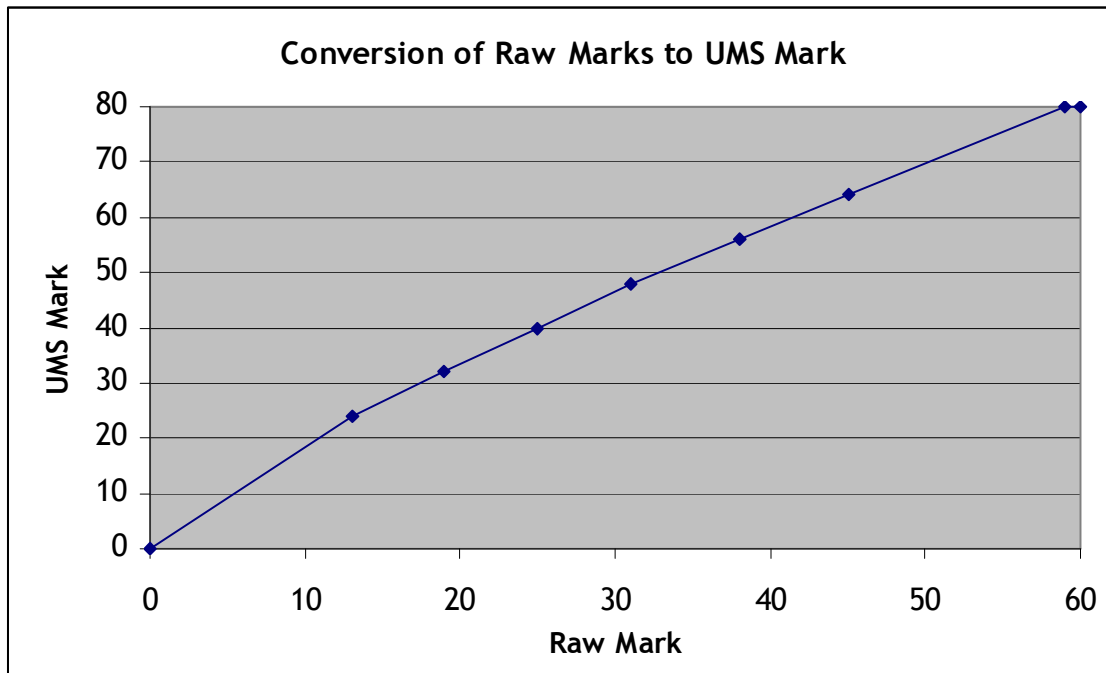
	Maximum Mark	Boundary at each grade					
		A	B	C	D	E	N
Raw Mark	60	45	38	31	25	19	13
UMS Mark	80	64	56	48	40	32	24

Graph 1 shows the pairs of marks plotted with the raw mark on the horizontal axis against the uniform mark on the vertical axis. Straight lines join adjacent points. The line connecting the points for Grade A and Grade B is extended to give the raw mark at which the maximum of 80 uniform marks is reached.

For any raw mark, the uniform mark can be read off the graph. In this example, the maximum uniform mark is awarded for a raw mark below the maximum of 60. In fact, the raw mark is 59 when the maximum uniform mark is reached, this is known as the 'cap'. All candidates who gain 59 or 60 raw marks will be awarded a uniform mark of 80.

If extending the line connecting Grade A and Grade B results in the maximum raw mark converting to less than the maximum uniform mark then this extension, or 'cap', is not used. Instead, a point is plotted of maximum raw mark against maximum uniform mark. A straight line is drawn from Grade A to this point and the resulting line is used to read off the uniform marks in this range.

Graph 1



The Conversion to Uniform Marks in A2 units Illustrated

The conversion in A2 units is slightly more complex due to the addition of A*. The following example illustrates the conversion in unit 6CR03.

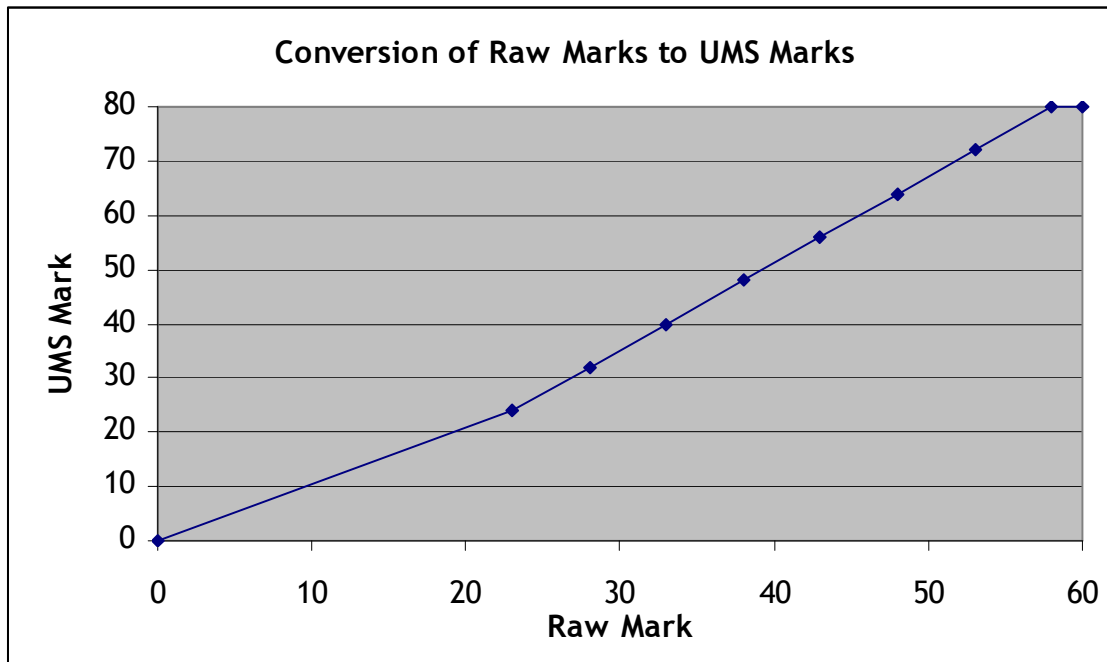
Table 4

	Maximum Mark	Boundary at each grade						
		A*	A	B	C	D	E	N
Raw Mark	60	53	48	43	38	33	28	23
UMS Mark	80	72	64	56	48	40	32	24

Graph 2 shows the pairs of marks in table 4 above plotted as in graph 1, though this time with the addition of A*. The line connecting the points for Grade A and Grade B is extended to give A* at 53 raw marks and 72 uniform marks (or 90% of the available uniform marks). The line is then extended further to give the cap, the point at which the maximum of 80 uniform marks is reached.

In this example, the cap is at 58 raw marks. All candidates who gain 58, 59 or 60 raw marks will be awarded the maximum uniform mark of 80.

Graph 2



In cases where the distance above Grade A is less than twice the difference between Grade A and Grade B the conversion works differently. A* is set midway between Grade A and the maximum mark and there is no 'cap'².

MAKING THE AWARD

Cashing-in

Table 5 shows the number of uniform marks required to achieve each grade in AS and A level. Like the unit boundaries, these are also fixed.

Table 5

	AS	A level
Maximum mark	200	400
A	160	320
B	140	280
C	120	240
D	100	200
E	80	160

When a candidate 'cashes-in' for an AS or A Level award, assuming eligibility rules are satisfied, the uniform marks from the contributing units are simply totalled to give a final subject mark.

² The exception to this is when the calculated A* conversion point is not a whole number. A* is rounded down to the nearest whole mark, to the benefit of candidates. The cap is then set the same number of marks above A* as Grade A is below A*.

Grade A*

From June 2010, Grade A* is available for A level qualifications (not for AS). To gain a Grade A*, candidates must gain grade A on the qualification overall and at least 90% of the maximum uniform mark on the A2 portion of the award. For example, for an A level with a maximum uniform mark of 400, candidates gain Grade A* if they obtain at least 320 uniform marks overall and at least 180 uniform marks of the 200 available for the A2 portion of the award.

Examples

Using the earlier examples of raw grade boundaries, these examples show how candidates' raw marks for each unit convert to their overall qualification grade.

Table 6 - Candidate 1 cashing-in for an AS Level

Unit	Raw Mark	UMS Mark
6CR01	30	47
6CR02	51	76
Total UMS		123

6CR01: A raw mark of 30 falls within the D range. The number of uniform marks available in this range are: 40-47. 30 raw marks convert to 47 uniform marks.

6CR02: A raw mark of 51 falls within the C range. The number of uniform marks available in this range are: 72-83. 51 raw marks convert to 76 uniform marks.

Totalling the uniform marks achieved in each unit gives 123 uniform marks. Reading off from Table 5, it can be seen that candidate 1 will be awarded a Grade C for the AS level.

Table 7 - Candidate 2 cashing-in for an A Level

Unit	Raw Mark	UMS Mark
6CR01	53	73
6CR02	43	67
6CR03	58	80
6CR04	53	76
Total UMS		296

6CR01: A raw mark of 53 falls within the A range. The number of uniform marks available in this range are: 64-80. 53 raw marks convert to 73 uniform marks.

6CR02: A raw mark of 43 falls within the D range. The number of uniform marks available in this range are: 60-71. 43 raw marks convert to 67 uniform marks.

6CR03: The maximum uniform mark is achieved at 58 uniform marks, therefore with 58 raw marks this candidate would achieve 80 uniform marks.

6CR04: A raw mark of 53 falls within the C range. The number of uniform marks available in this range are: 72-83. 53 raw marks convert to 76 uniform marks.

Totalling the uniform marks achieved in each unit gives 296 uniform marks. Reading off from Table 5, it can be seen that candidate 2 will be awarded a Grade B for the A level.

Table 8 - Candidate 3 cashing-in for an A Level

Unit	Raw Mark	UMS Mark
6CR01	48	67
6CR02	63	89
6CR03	52	70
6CR04	77	114
Total UMS		340

6CR01: A raw mark of 48 falls within the A range. The number of uniform marks available in this range are: 64-80. 48 raw marks convert to 67 uniform marks.

6CR02: A raw mark of 63 falls within the B range. The number of uniform marks available in this range are: 84-95. 63 raw marks convert to 89 uniform marks.

6CR03: A raw mark of 52 falls within the A range. The number of uniform marks available in this range are: 64-71. 52 raw marks convert to 70 uniform marks.

6CR04: A raw mark of 77 falls within the A* range. The number of uniform marks available in this range are: 108-120. 77 raw marks convert to 114 uniform marks.

Totalling the uniform marks achieved in each unit gives 340 uniform marks. Reading off from Table 5, it can be seen that candidate 3 can be awarded a Grade A for the A level, however, because the candidate gained 184 uniform marks for the A2 portion of the qualification, a Grade A* is awarded.