

It is requested that the DEGREE GRADE be changed from the continuous interval [5, 10] to the qualitative grading system which contains 5 scores, **A, B, C, D** and **E**.

WE PROPOSE:

1st) That the degree be viewed as one course.

2nd) To consider as a class each year and per graduation ceremony as follows:

<i>If there are at least one hundred (100) graduands then they constitute the class and on the basis of them only is the percentiles rule applied</i>	This limits the possibility of overestimating low average degrees and increasing the C.
<i>If there are fewer than one hundred (100) graduands then they constitute the class once they are supplemented by their colleagues who graduated in a previous ceremony or ceremonies in succession so that we again have at least one hundred people in the class that is created. The percentiles rule is applied to this class</i>	This limits the possibility of overestimating low average degrees and increasing the C.

3rd) Because the average is something continuous (non-discrete number) which belongs to the interval [5.00, 10.00], we should create 6 classes which will again distinguish the average grades into 6 scores **{5,6,7,8,9,10}** as follows:

[5.00, 5.49)	5
[5.50, 6.49)	6
[6.50, 7.49)	7
[7.50, 8.49)	8
[8.50, 9.49)	9
[9.50, 10.00]	10

4th) From there on, the following method of conversion is applied, based on the concept of percentiles (logic of percentiles) and is in agreement, at least approximately, with the normal distribution:

Limits of percentiles and qualitative scores:

A=90.01-100 (10%)

B=65.01-90 (25%)

C=35.01-65 (30%)

D=10.01-35 (25%)

E=0-10 (10%)

The form that determines the percentile is as follows:

$$\frac{cf_{i-1} + 0.5(f_i)}{N} \times 100\% \quad (4.1)$$

f_i = The total occurrences of **i** score {5,6,7,8,9,10}

cf_i = The total of all the grades that are less than or equal to **i** {5,6,7,8,9,10}. Therefore, especially for **i** = 5 is $cf_{i-1} = 0$, by default.

N = the total of successful students or those who constitute a class, which we grade.

EXAMPLES

GRADE	f_i	cf_i (essentially the percentile)	$\frac{cf_{i-1} + 0.5(f_i)}{N} \times 100\%$	ECTS GRADING
5	25	25	15.63	D
6	19	44	43.13	C
7	17	61	65.63	B
8	10	71	82.50	B
9	7	78	93.13	A
10	2	80	98.75	A
N	80			

GRADES	f_i	cf_i	$\frac{cf_{i-1} + 0.5(f_i)}{N} \times 100\%$	ECTS GRADING
5	6	6	12	D
6	5	11	34	D
7	7	18	58	C
8	4	22	80	B
9	3	25	94	A
10	0	25	100	A

N	25		
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GRADES	f_i	cf_i	$\frac{cf_{i-1} + 0.5(f_i)}{N} \times 100\%$	ECTS GRADING
5	5	5	27.78	D
6	0	5	27.78	
7	0	5	27.78	
8	4	9	77.78	B
9	0	9	100	
10	0	9	100	
N	9			

GRADES	f_i	cf_i	$\frac{cf_{i-1} + 0.5(f_i)}{N} \times 100\%$	ECTS GRADING
5	5	5	50	C
6	0	5	100	
7	0	5	100	
8	0	5	100	
9	0	5	100	
10	0	5	100	
N	5			

THE FOLLOWING SPECIAL CASES EXIST:

1. **One person** (one-member academic unit) **HAS NO PERCENTILE AND** has the following stable distribution (A=10, 9 / B=8/ C=7/ D=6 / E=5)
4. The same grade for all examined means **C** as is can be seen in one of the above examples.

http://en.wikipedia.org/wiki/Percentile_rank

Crocker, L., & Algina, J. (1986). "Introduction to classical and modern test theory." New York: Harcourt Brace Jovanovich College Publishers.