

Category:	Procedure:	
<b>Instructional Goals and Objectives</b>	<b>Senior Classification</b>	
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<b>AP-I-133</b>	<b>May 2016</b>	<b>March 2022</b>

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2 **KNOX COUNTY’S EQUALIZATION FORMULA FOR DETERMING VALEDICTORIAN AND**  
3 **SALUTATORIAN**

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5 This formula prevents any student from either gaining an advantage or being penalized for the number of  
6 high school courses completed. This formula prorates the regular courses in such a way that the number of  
7 credits completed is equivalent for all students competing for the Valedictorian and Salutatorian positions,  
8 while retaining the quality points for all Advanced Placement (AP), International Baccalaureate (IB), dual  
9 enrollment, National Industry Certification (NIC), and honors courses. This formula considers all course  
10 weighting and bonus points for AP, IB, dual enrollment, Statewide Dual Credit, National Industry  
11 Certification, and honors courses in its calculation. All grades included on the high school transcript shall  
12 be used in this calculation.

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14 Students in middle school who successfully complete a course and the End-of-Course (EOC) exam in a class  
15 taught using the high school curriculum standards will earn high school credit and have that credit placed on  
16 the student’s high school transcript.

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18 **The Knox County Equalization Formula** will be applied to the seventh semester grades for all students  
19 who are competing for the Valedictorian and Salutatorian positions. The top two GradePoint Averages after  
20 application of the equalization formula will earn Valedictorian and Salutatorian respectively.

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$$\frac{\begin{matrix} \text{AP, IB Dual Enrollment,} \\ \text{Statewide Dual Credit, and} \\ \text{National Industry} \\ \text{Certification Quality Points} \\ \text{(including the bonus points)} \end{matrix} + \begin{matrix} \text{Honors Quality} \\ \text{Points (Including} \\ \text{the bonus half} \\ \text{points)} \end{matrix} + \begin{matrix} \text{Regular} \\ \text{Quality} \\ \text{Points} \end{matrix} * \left[ \frac{28 - (\text{Number of AP, IB,} \\ \text{Dual Enrollment, Statewide Dual} \\ \text{Credit, Honors, and National} \\ \text{Industry Certification Courses})}{\text{Number of Regular Courses}} \right]}{28} = \text{GPA}$$

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28 **WHEN TO PERFORM THIS CALCULATION**

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30 Schools will use the grades from the final marking period at the end of Semester 1. In the case where students  
31 are enrolled in year-long courses, (After the 7<sup>th</sup> semester, schools should apply both bonus points and quality  
32 points to the semester grades as if that were the final grade for the year.) The number of attempted credits  
33 should also be counted as if they were the final credits for the year.

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35 **CALCULATION OF THE TOP 10%**

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37 This ranking is generated by the student information system, (weighted GPA) as Decile 1 at the end of the  
38 7<sup>th</sup> semester.

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41 During the Spring Semester of each year a common date will be provided for all high schools to publicly  
42 release the Valedictorian, Salutatorian and top decile “Upper 10%.”

## EXPLANATION OF KNOX COUNTY EQUALIZATION FORMULA

A problem occurs when a student in the running for these awards does not have the same number of credits as the rest of his or her peers. The majority of students will have completed seven semesters with four units of credit for 28 credits. If a student has an additional credit, like Driver's Ed from a summer, the effect is a diminishing of that student's grade point average. Fewer courses lead to an expansion of the GPA.

### Scenario 1

Student P has 28 credits that are all A's. Four are from AP courses with their additional grade points and six are from honors courses with their additional half points.  $GPA = (4*5 + 6*4.5 + 18*4)/28 = 4.25$

Student Q has the same grades as student P with an additional regular course where an A was also earned.  $GPA = (4*5 + 6*4.5 + 19*4)/29 = 4.241$

Student R has the same grades as student P, but transferred in from a traditional schedule after R's freshman year with two fewer regular course A's but the same number of AP and honors course.  $GPA = (4*5 + 6*4.5 + 16*4)/26 = 4.269$

**What we see is that when the number of AP and honors courses is identical, the number of regular courses has an effect on the GPA.**

### A SOLUTION

It has been suggested that GPA be calculated using just quality points. However, if a student equivalent to student P above took an extra regular class and received a D, that student would have more quality points due to the number of classes taken.

In an effort to not penalize honor students who have gone beyond expectations, it was determined to retain the quality points for all of the AP and honors courses while prorating the regular courses in such a way that the number of credits would be equivalent. Using this process, students Q and R would end up with the same GPA as student P.

### Scenario 2

As before, student P has 28 credits that are all A's. Four are from AP courses with their additional grade points and six are from honors courses with their additional half points.

$GPA = (4*5 + 6*4.5 + 18*4)/28 = 4.25$

Student S has 29 credits that are all A's. Five are from AP courses with their additional grade point and six are from honors courses with their additional half point.

$GPA = (5*5 + 6*4.5 + 18*4)/28 = 4.286$

Student T has the same grades as student P with an additional honors course where an A was also earned.

$GPA = (4*5 + 7*4.5 + 18*4)/28 = 4.268$

Student U transferred in from a traditional schedule and only has 26 credits. Four of these are AP classes with A grades, eight of them are honors classes with A grades, and the remaining 14 are regular classes with A grades.

$GPA = (4*5 + 8*4.5 + 14*4)/28 = 4.286$

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We see that students S and U are tied. This is because their AP and honors quality points are the same. They took the most rigorous courses and were rewarded accordingly. These examples were simplified by using all A's, but the concept remains the same for any combination of grades. When the number of courses is not 28, the AP and honors courses are kept intact while the regular courses are prorated.