

Gradebook Assessment by อนุญัตน์ บั้งเส็ง

Instructions:

Below is a sample grade book for a high school mathematics class. Using the data analysis skills presented in the course, analyze and evaluate the grade book.

High School Algebra 1-9th Grade

Hi algebra students! Here is what you will be completing this semester! I will post a calendar in the course. Please submit everything by the due date. Late work will have a 50% deduction, so remember to get everything in on time!

Assignment	Points
18 quizzes-computer scored	50 points each
18 homework assignments-computer scored	20 points each
18 Discussion Posts-Post a discussion, then reply to two classmates-teacher graded	5 points each
4 Graphing Assignments-these you will need to scan into the LMS –teacher graded	25 points each
4 Unit Projects-these are report- type projects on a real life application of algebra-teacher graded	25 points each
4 Unit Tests-Partially computer scored, and partially teacher graded.	100 points each
1 Final Exam-computer graded	400 points
Extra Credit You will receive 5 points each time you come to our weekly virtual class lecture.	90 points available, depending on how much you attend the virtual class

Rubric for Assessment

Rating	Justification
0	Evaluation and analysis is not present
1	The author attempted to analyze some of the information, though inaccurate or incomplete, without logical rationale and depth.
2	The author analyzed and evaluated the item with partial justifications, depth, and rationale, although not conclusive and thorough.
3	The author synthesized the analysis and evaluation in a commendable matter, presenting mostly valid, in-depth justifications for the views presented, with most points having significant depth and rationale.
4	The author synthesized the analysis and evaluation in an exemplary manner, with highly organized justifications, in-depth rationale, and accuracy, giving professional viewpoints.

Instructions:

Next, fill in your analysis and evaluation based on the above course information. You will be able to enter your answers directly in the table below (in the original, it was in the text boxes below). Be sure to complete all sections, including the comments.

<u>Item Analysis</u>	<u>Result (to 3 s.f. where possible)</u>
1. Total number of points available in the course	2,350
2. Weighted percent of discussion assignments	3.83%
3. Weighted percent of unit projects.	4.26%
4. Weighted percent of graphing assignment	4.26%
5. Weighted percent of quizzes	38.3%
6. Weighted percent of tests	17.0%
7. Weighted percent of final exam	17.0%
8. Percentage of extra credit items	3.83%
9. Average number of assignments per week (18 week semester)	3.72
10. Percent distribution of teacher scored assignments vs. computer scored assignments	41 computer-graded; 61.2% 30 teacher-graded; 44.8%
<u>Course Evaluation</u>	<u>Comments</u>
11. Potential in the course for student engagement	See below
12. Intended consequences	
13. Possible unintended consequences	
14. Overall perceived assessment philosophy from the current set up of the course gradebook	
15. Overall 'reasonableness' of the course for the intended grade level and subject material	
16. Concerns for special populations (special needs, at-risk, or gifted students)	
17. Overall recommendations and commendations for this course	

*If you have any question, please post them to the Peer Assessed Assignment Questions Forum.

Student specifies the potential of the course for student engagement.



The potential of the course for student engagement is such that there is incentive (though small, at only 3.83%) for using the discussion forums. This may be because some of the students may be relatively introverted, or simply unable to explain the concepts/answer questions posted there even if they may understand the topics by heart themselves, which may account for the lack of contribution to such forums (most of the discussion posts would be related to the course content, in this case algebra). Of course, the points here can encourage the students to help each other through the forums. The extra credit, which is worth the same amount as the discussion posts section (assuming that attendance is perfect) can easily make up for the discussion posts for those who do not wish to post discussions for their various reasons and they can still get 100%. As the course is 18 weeks long, this extra credit will help to entice students to stay throughout the 18 weeks instead of leaving after the first few weeks.

Some areas of study, such as algebra, can have seemingly little connection to real life applications and problems. By having unit projects, this will allow them to learn the topics better since they can relate it to something meaningful and such learning is more effective than brute force alone. Being able to understand a concept means little if one does not know how much applications it can have in situations outside the exam/classroom.

Finally, the exam, while having a high weightage compared to any other single component, is only worth 17.0% of the grade. This would deter those who know the course from leaving and being inactive until the last week and then do the exam only in order to complete the course. It would also penalize the more active (though less academically strong) students by a smaller amount, allowing them to still attain a passing grade for the course as a whole.

Student explains the possible unintended consequences.

Mostly has got to deadlines. The 50% penalty can be quite heavy when the deadline is missed. There can be time zone differences and small differences between the time set in the user's home and the system's time; however, the system's time is usually used to determine if a deadline is used. If the deadline is missed by as little as a few seconds the penalty suffered is quite harsh. Perhaps 10% penalty for each day late, to a cap of 50% after 5 days for the given assignment should be implemented instead.

The deadlines, by right, should be fixed to what it was when the assignment was first available. However, when the deadline may be incorrectly set, it is then later rectified. If the deadline is shifted to a later date, everything is fine, but when it is shifted forward a few days into the assignment, it can cause problems. For instance, I know of a different course where the late days feature for a particular assignment was there, but was then removed later, just before the deadline. This resulted in several people complaining since they only got partial credit for the assignment. What most likely happened was that when they saw the ability to apply late days, they did not do the assignments until just before the original deadline (using the late days), but upon returning discovered that there was no more option to do so. In the given scenario, a similar situation can happen, only that the deadline itself is shifted instead of the ability to use late days. It can also happen if the server is overloaded shortly before a deadline.

In computer grading, it can be flawed especially when some questions are open ended. This is due to the computer only recognizing some keywords/a particular way of entering the answer. In the former case, it can be exploited by keying in a nonsensical answer that has the keyword(s) and hence obtaining full credit. The other problem (especially in Physics and Math) is the keying in of an exact answer. In particular when the answer has to be in standard form or the numbers must be in a certain convention e.g. keying in $5 \cdot 10^6$ for five million when the system only recognizes 5E6 and hence the answer is marked wrong. This applies especially in the case where there is no preview button for the full expression of the number.

Often plagiarism can be a problem. This is due to some individuals or groups lacking ethics and hence they will blatantly copy their assignments. This will happen mostly in the report, if it is not algebra alone. This can happen if there is a lack of incentive to actually do the task to the fullest of their ability, perhaps because the assignment concerned could be too difficult and/or tedious. It may also happen even in a timed test as it can be difficult to tell if there is a person/bot that can calculate answers fast enough to circumvent the time limit, which means that the student is not really doing the stuff.

Finally, discussion posts have to be monitored. Otherwise, some scrupulous students may post irrelevant things on the discussion post just for the sake of getting their points. This would then impact other students who may not be able to give proper feedback or comments even if they wanted to. Also, if someone went overseas, fell sick etc. and hence lacked access to the course for a few weeks (during the course) there should be allowances in this aspect for them to not be penalized. Although that may not be necessary given the low weightage of the discussion part.

Student comments on the overall 'reasonableness' of the course for the intended grade level and subject material.

Overall quite reasonable, although the subject material itself can make a big difference. Use of bad font and unclear concepts, for example, will make the course ridiculous to follow properly. For the lower grades, it may be necessary to include colourful pictures which can beautify the slides and also avoid detracting meaning from the lesson. If possible, to actually enhance the meaning given. The first lesson should presume no prior knowledge of the course content (algebra) unless otherwise stated. The way that the lesson should be portrayed would differ between the lower and upper grades since what may work well for one level may not work optimally for the other levels; younger children need to have things explained to them more thoroughly

Student discussed their concerns for special populations (special needs, at-risk, or gifted students).

For gifted students, there should be links to more advanced material, perhaps some optional quizzes that do not count for credit. This will help to keep them engaged after they breeze through the relatively easier material meant for all. Many gifted students do need special recognition in subject areas because although they usually excel at everything they do, they can still encounter problems here and there, perhaps in the advanced material

For special needs students, it would depend on the scale of the course. Smaller ones may allow for timed sections to have extra time on them or the teacher may allow for them to consult him/her directly for further clarification of the course content. A fresh start may also be considered. Those on the scale of Coursera would be trickier due to the sheer number of participants which prevent individualized treatment. In that case the final exam should not be timed but only 1 attempt allowed on it; this would also bring integrity into play.

At-risk students should be allowed to showcase their talents which may have previously gone unnoticed.