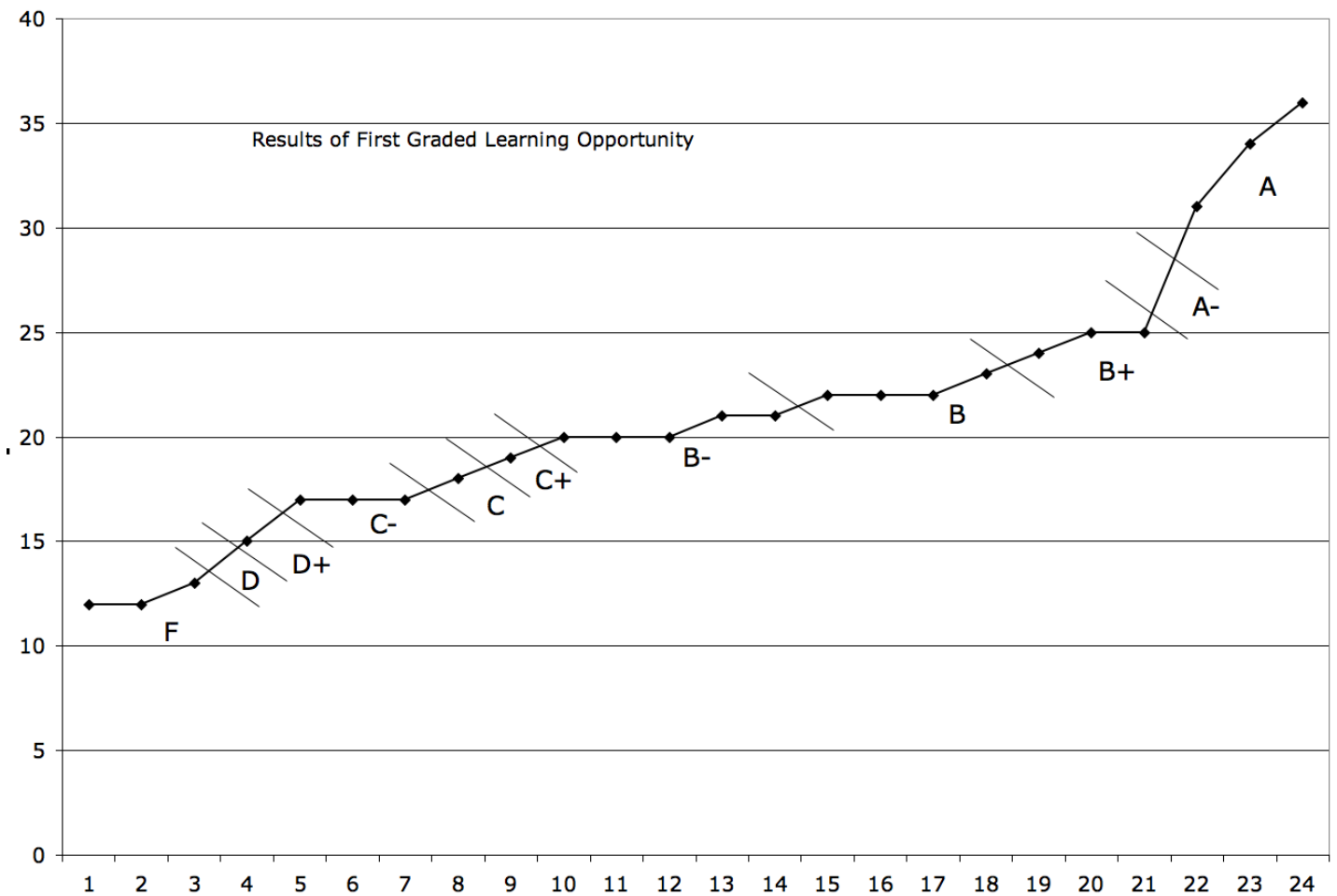


Grading Policies

Alfred University and New York State both require that students receive grades for their performance. I believe that most AU faculty assigns grades on a relative, not an absolute basis. It may not seem to be the case, for instance when scoring above a 90 on an exam means you get an A, but in such cases I think that the exams are designed for the students in the class. Alfred University does not serve the same students as Swarthmore College, for example, and I sincerely doubt that exams given at both places are comparable.

It is a straightforward process to rank the performance on a multiple-guess Graded Learning Opportunity. Those with higher scores should then get the higher grades. Where the difficulty arises is in determining what letters to assign.

My policy is “The average student, doing the average amount of work, should get the average grade.” The average score on a Graded Learning Opportunity is the arithmetic mean, often just called the mean. However, figuring out what letter to assign to that “average grade” is has proven to be difficult. Lacking any guidance from the administration, I have usually figured this should be between a C+ and a B-. I have taught at Alfred University since 1982, so I have a reasonable idea of what to expect of a class. If I am disappointed, I may move the average down to a C+, or even a C. If I am delighted, I may move it up.



Once the average is pinned, how do we figure out breaks between grades? One measure of how much spread exists in a set of numbers is the Standard Deviation. If a Graded Learning Opportunity has all of its scores

within a narrow range, the Standard Deviation is small. There is a value, called a “Z-score,” which combines the mean and standard deviation in the following way:

$$\text{Z-score} = (\text{Score} - \text{Mean}) / \text{Standard Deviation}$$

A Z-score of 0 means the score is the mean, whereas a Z-score of 1 means the score is one Standard Deviation above the mean. With the exceptions of Labs, I calculate the Z-scores for everything I grade, and it is the Z-score which is used in calculations determining letter grades.

As a first approximation, I consider a change of 1 in Z-score to produce a change of one letter grade. Hence a Z-score of 1 would be between a B+ and an A-. By looking at the distributions of scores and letter grades, I then tinker with the boundaries until I am satisfied with the results. In the end I usually have a class grade point average close to 2.5.

There is no opportunity to do extra work or get extra credit.

Lab Grades

Lab grades are different. An experienced professional geologist and a complete neophyte should both be able to make good use of the opportunities provided by our field trips and laboratory sessions. Their observations and the interpretations they derive from those observations are likely to be very different. Hence it seems fair to base the grading of labs on effort and attitude.