Grading of BMEN E3500, Fall 1999

As agreed, the final grade was determined as an evenly weighted (50-50) average of the mid-term and final-exam grades, normalized.

Review of the normalization process. The raw score is subjected to the following transformation.

\[
\text{Normalized Score} = \frac{\text{Raw Score} - \mu}{\sigma} + 2.5
\]

I put the averaged normalized scores in order, highest at the top, lowest at the bottom. The distribution is shown in the bar chart below. (Example: There was one grade greater than 4. There were 4 grades between 3.5 and 4. Etc.)

![Bar chart showing the distribution of grades]

I then went down this list and assigned grades. See the figure below. I gave one A, 4 A-’s, 5 B+’s etc. The range of scores that got these grades is shown below the red bars. For example, the lowest B was 2.76; the highest was 3.06. As the chart shows, there was no re-positioning: Nobody below a 'cut' got a higher grade. Nobody above a cut got a lower grade.
Conversion of Scores to Letter Grades

- A (1)
- A- (4)
- B+ (5)
- B (5)
- B- (2)
- C+ (3)
- C (5)
- C- (4)
- D (1)
- F (3)