The following document presents the calculation of Hector Martinez's course average as of June 1rst, 2016 for the class MATH146 taught by Martin Sauer at South Seattle Community College. This document's submittal counts as extra credit on the 4th test taken on May 31rst, 2016 of the above mentioned class .

The calculation of the course average is sourced from the syllabus document “Syllabus – Statistics – Spring 2016.pdf” where on Page 2, in the grading section, it states:

[1] “Your final Grade will be calculated by averaging four exams (weighted 20% each; lowest score dropped), the average of all quizzes (weighted 15%), and a comprehensive Final Exam (25%).”

Hector's grades in the course up to June 1rst, 2016 combined with the reference [1] criteria is sufficient to calculate a course average. Due to the timing at the creation of this document, data for Quiz #5, the Final Exam, and this extra credit assignment are unavailable and are therefore assumed to be zero. Hector's course grades up to this point are tabulated as follows:

Item	**Score [pts]**	**Extra Credit [pts]**	**Total Score**	**Percentage**
Extra Credit Quiz:	130/130	N/A	130/130	100%
Quiz #1	140/150	N/A	140/150	93.33%
Exam #1	170/200	12/14	182/200	91%
Quiz #2	150/150	N/A	150/150	100%
Exam #2	190/200	10/10	200/200	100%
Quiz #3	146.67/150	N/A	146.67/150	97.78%
Exam #3	200/200	9/9	209/200	104.5%
Quiz #4	140/140	N/A	150/150	100%
Exam #4	170/200	0/7	170/200	85%
Quiz #5	0/150	N/A	0/150	0%
Final Exam	0/200	N/A	0/200	0%

Four exams have been taken, the weighted average of the exams is as follows:

- The best three exam scores (by percentage) are: 91%, 100%, and 104.5%
- The weighted average of the exams is:

$$Avg_{exam} = 0.2 * 0.91 + 1.00 * 0.2 + 1.045 * 0.2 = 0.5910 \qquad [2]$$

Five quizzes have been taken, the weighted average of the quizzes is as follows:

- The best four quizzes scores (by percentage) are: 100%, 93.33%, 100%, 97.78%, and 100%
- The weighted average of the quizzes is:

$$Avg_{quizzes} = \frac{1.000+0.9333+1.000+0.9778+1.000}{5} * 0.15 = 0.1473 \qquad [3]$$

Conservatively assuming that Hector receives a 0% in the final exam ($Avg_{final} = 0$) and combining results [2] and [3], Hector's final score is as follows:

$$Avg_{course} = Avg_{exams} + Avg_{quizzes} + Avg_{final} = 0.5910 + 0.1473 + 0 = 0.7383$$

This means that any score on this extra credit assignment does not affect my overall course grade as the Exam #4 score will prevail as Hector's lowest score for any of the four exams. Additionally, a score of above 93.33% on Quiz #5 negligibly improves Hector's course average. Finally, to receive a 4.0 for the course (a 95% average), Hector must score above 84.67 in the Final Exam.