

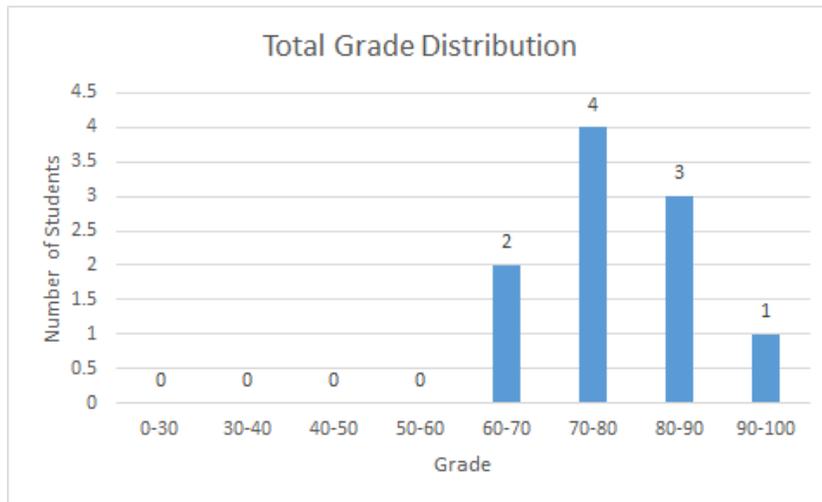
Exam 1 Report

10/14/2020

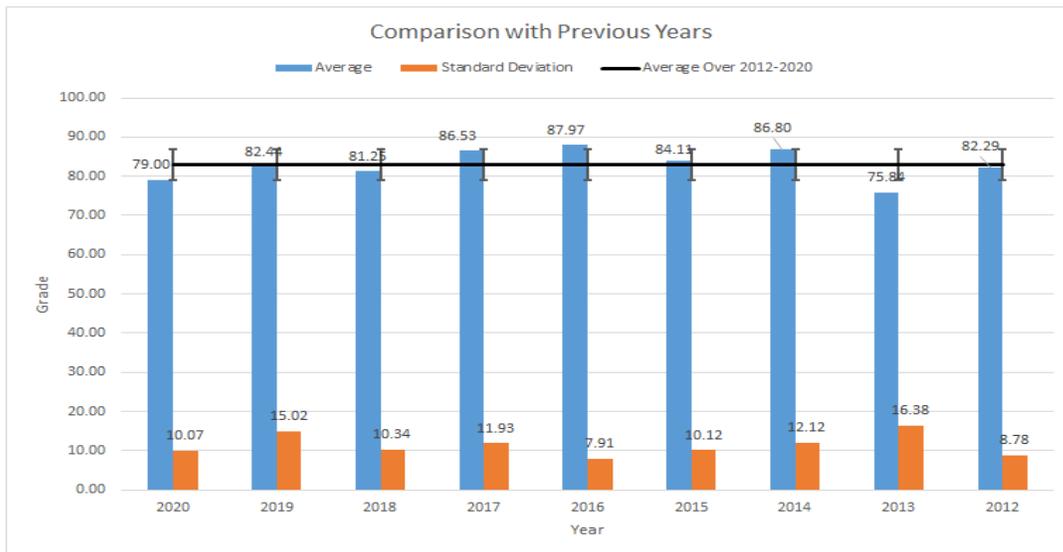
1. Summary

Total number of students	10
Attended	10
Missed	0
Number of problems	2
Average grade	79.00
Standard deviation of grades	10.07

2. Grade distribution



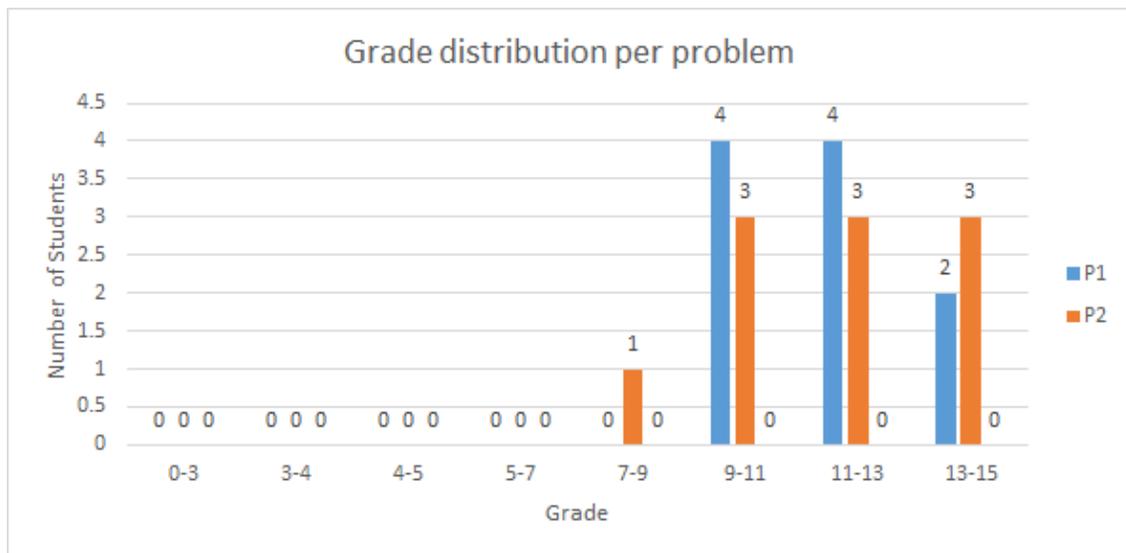
3. Comparison with past years



4. Individual problem breakdown



5. Grade distribution per problem



6. Comments

PROBLEM 1

- One student could not use continuity equation, so calculate wrong V_2 .
- Some of students used same height for both water and mercury, so calculated wrong P_1
- Many students could not use a linear momentum equation correctly, and missed pressure force term when they calculate 'x' direction of force.
- Some of student confused the direction of force and indicated wrong sign.
- In case of head loss, most students solved correctly, but one student neglect the head loss at the beginning and solved the problem.

PROBLEM 2

- Most student answered correctly for both (a) and (b)
- Several students could not get the correct velocity profile, and used wrong boundary condition.
- Many students confused the range of boundary which should be $-0.5h \sim +0.5h$
- In case of wall shear stress and flow rate, many students could not get correct answer because the velocity profile was not correct. But the general equation and its approach to solve each problems was okay.