

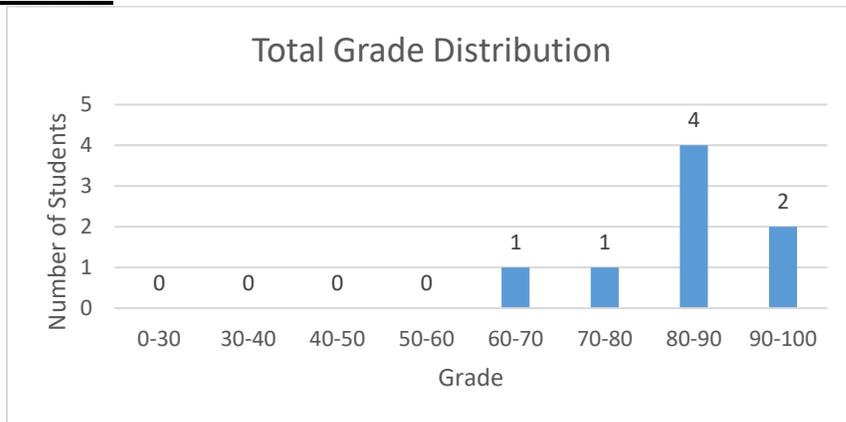
# Exam 1 Report

## 10/11/2023

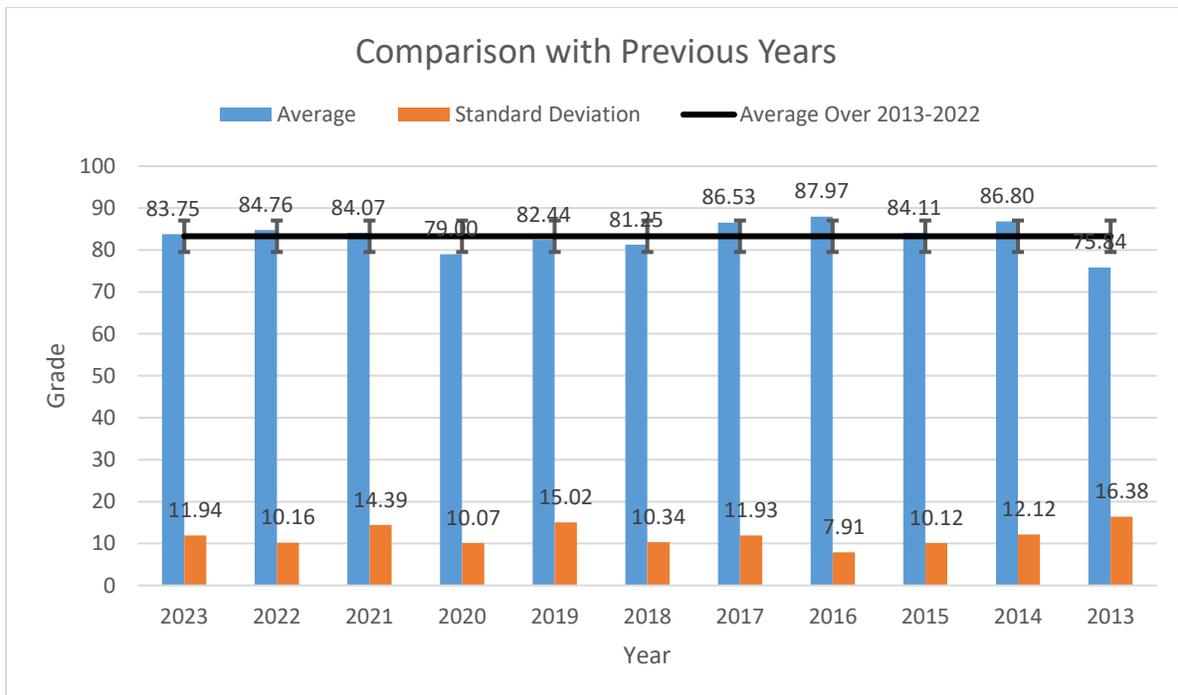
### 1. Summary

Total number of students	8
Attended	8
Missed	0
Number of problems	3
Average grade	83.75
Standard deviation of grades	11.94

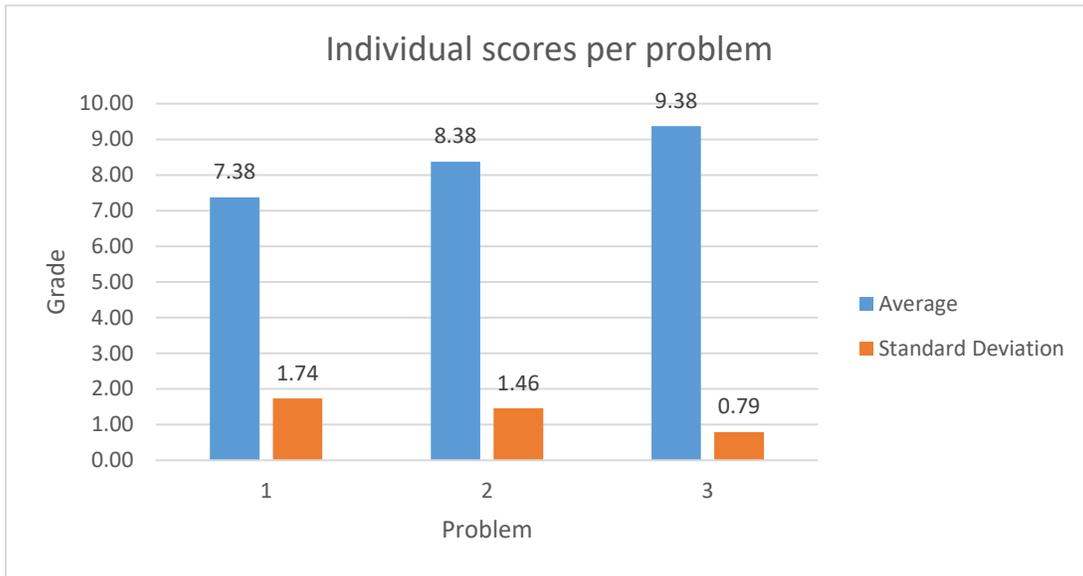
### 2. Grade distribution



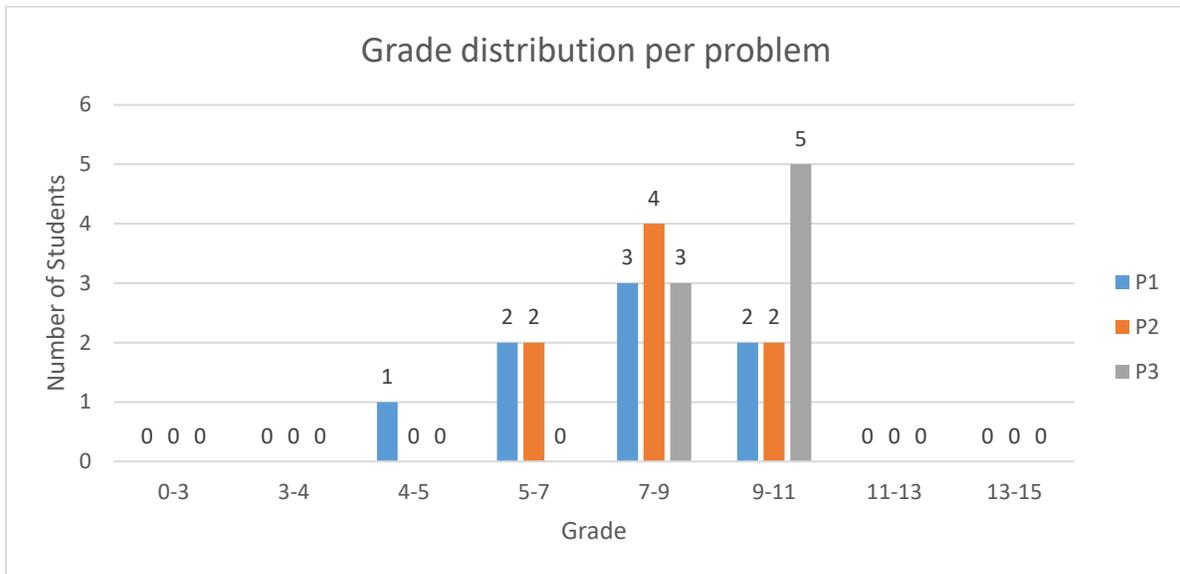
### 3. Comparison with past years



**4. Individual problem breakdown**



**5. Grade distribution per problem**



## 6. Comments

### PROBLEM 1

- Only one student included the pressure force in the momentum equation
- Most students had problem in evaluating the pressure at section 1 using the manometer equation
- Two students could not obtain the resultant force in the y-direction

### PROBLEM 2

- Six students did not apply the correct boundary condition at the air-water interface
- Two students solved the problem correctly
- Some students could not derive the expression for the wall shear stress and flowrate

### PROBLEM 3

- Most of the students solved the problem correctly
- Three student could not obtain the correct  $\Pi_2$  since they made mistakes in the linear system
- One student left the dimensionless parameters expressed as  $MLT$ , instead of their physical expression