Exam 1 Report

10/16/2024

1. Summary

Total number of students	14
Attended	13
Missed	1
Number of problems	3
Average grade	89.23
Standard deviation of grades	13.03

2. Grade distribution
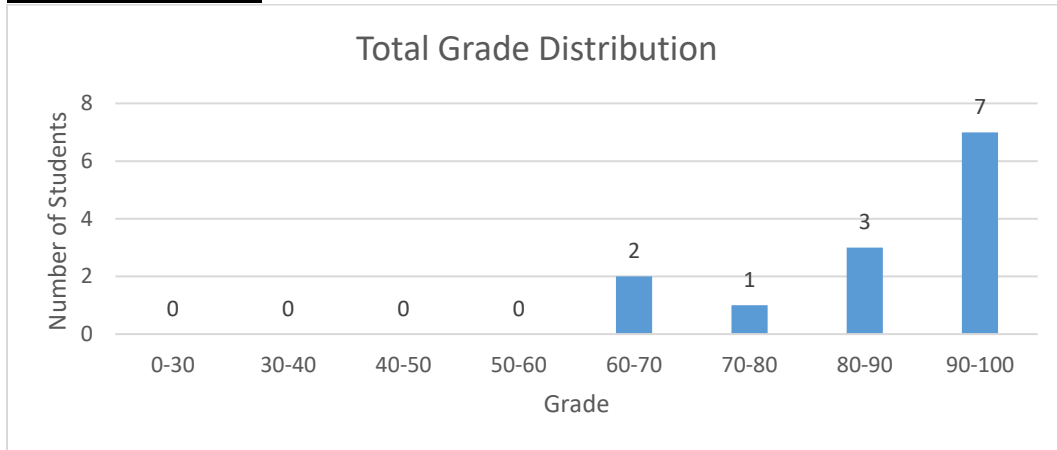
3. Comparison with past years
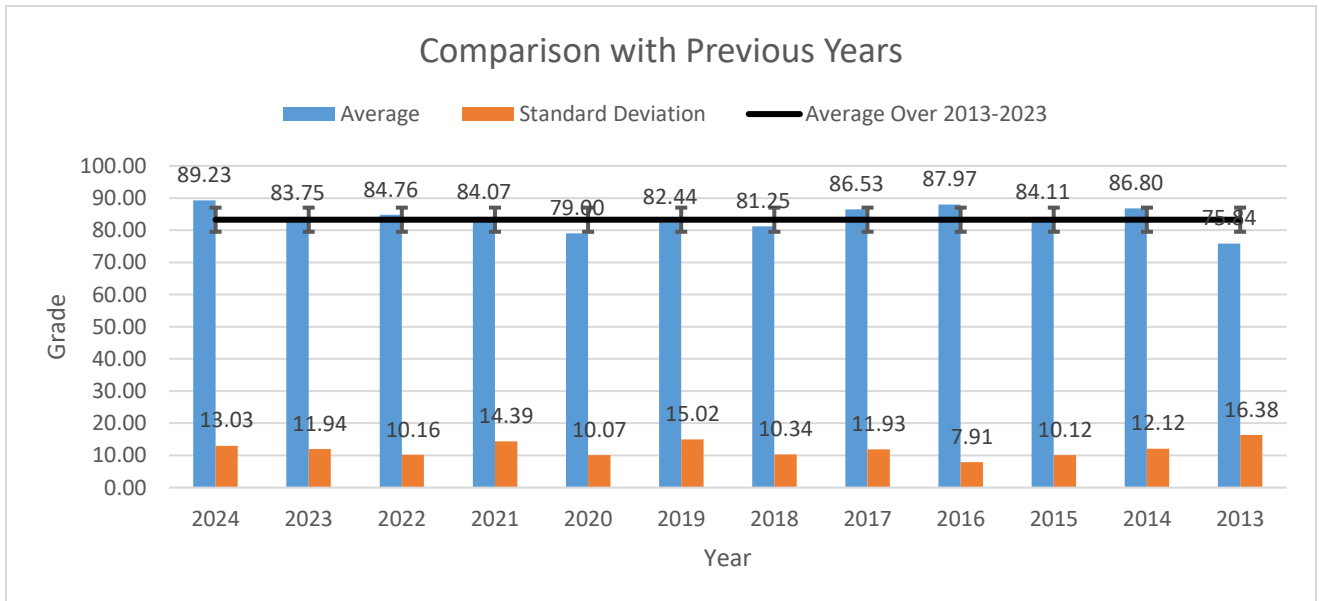
4. Individual problem breakdown

Individual scores per problem

Grade

9.38	9.19	8.19
1.06	1.42	1.74

■ Average
■ Standard Deviation

Problem: 1, 2, 3

5. Grade distribution per problem

Grade distribution per problem

Number of Students

■ P1
■ P2
■ P3

Grade	0-3	3-4	4-5	5-7	7-9	8-10
P1	0	0	0	1	3	9
P2	0	0	0	2	1	10
P3	0	0	0	6	2	5
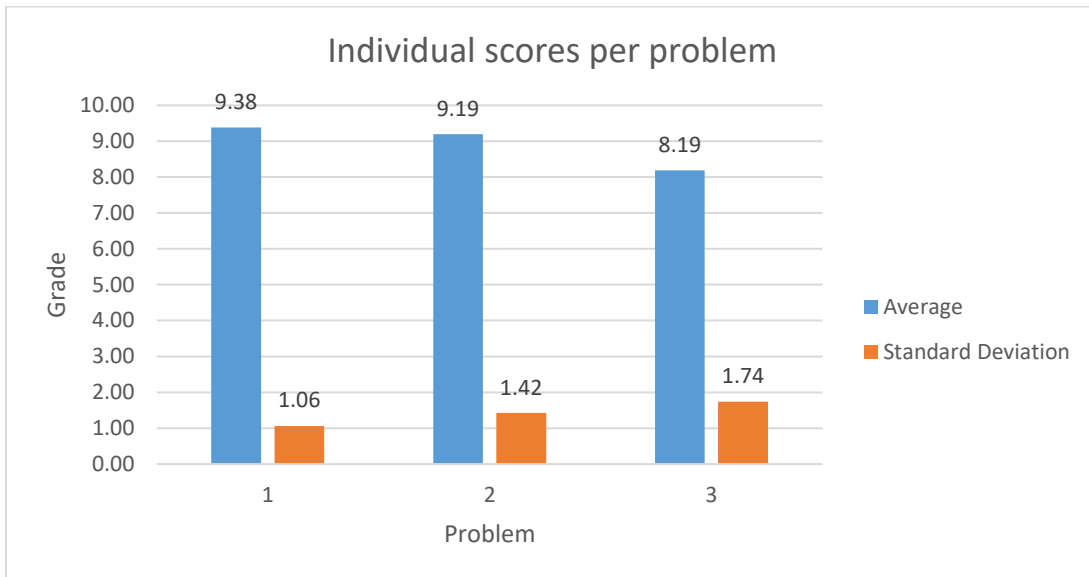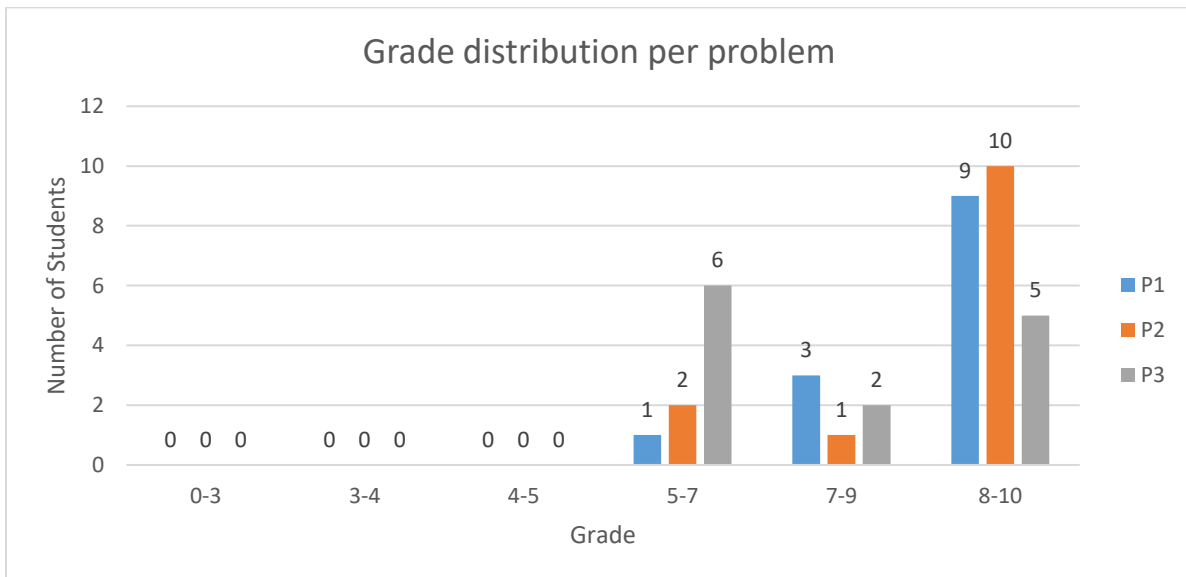
6. <u>Comments</u>

PROBLEM 1

- Some students could not obtain the correct sign for the momentum terms in the x-direction.
- Most students solved the problem correctly or with minor mistakes.
- One student considered the pressure force in the momentum equation, where it should be zero everywhere (ambient pressure).

PROBLEM 2

- Most students solved the velocity fields correctly, or with minor mistakes in the application of the boundary conditions.
- Some students could not evaluate the shear stress correctly and show that it is the same for the two fluids.
- One student did not neglect the gravity in the x-component, obtaining the wrong velocity field.

PROBLEM 3

- Many students used j=3, although only length and time are the dimensions used in this problem, i.e., j=2. Consequently, they solved for only 2 of the 3 Pi groups.
- Some students assumed the number of variables in the problem to be 4 instead of 5, resulting once again in the evaluation of an incorrect number of Pi groups.