EXAM #1 REPORT

	Number of Students	
Total	37	
Submitted	37	
Not Submitted	0	

GRADE DISTRIBUTION



DISTRIBUTION PER PROBLEM



INDIVIDUAL PROBLEM BREAKDOWN

	Problem1	Problem 2	Problem3	Total
Average	8.22	8.54	9.07	86.08
Std Dev	1.30	1.59	1.61	12.12



COMPARISON WITH LAST 4 YEARS



SPECIAL COMMENTS

Overall

- 3 Students did not follow the required exam note sheet format
 - 1 student zeroxed conversion factors to note sheet
 - 1 student included an example on note sheet
 - 1 student used a large sheet of paper, using both sides

Problem 1

- **Manometry**: Some students used $p_1 = (\rho_{merc} \rho_{water})h$ instead of $p_1 = \rho_{mercury}gh \rho_{water}g(0.6)$
- **Linear momentum**: some students did not include the force due to pressure; some students did not assume the correct direction for the forces
- **Energy equation**: most students did well on energy equation; some students did not consider the change in elevation

Problem 2

- **Continuity**: There were no issues in this part. Few students did not show the velocity relation $\frac{du}{dx} = 0$ by using continuity.
- X-momentum:
 - Very few did not cancel the pressure gradient term.
 - Many made a mistake in sign for the gravity force (- $\rho g \sin \theta$ instead of $\rho g \sin \theta$)
 - \circ Many forgot to divide the momentum equation with viscosity μ

Problem 3

- **Number of PI parameters**: Almost all students found the correct number of PI parameters.
- **Dimensions**: Most students used correct dimensions.
- **Repeating variables**: Most students used correct repeating variables.
- **Arithmetic**: Some students made small arithmetic errors when solving for the exponents.