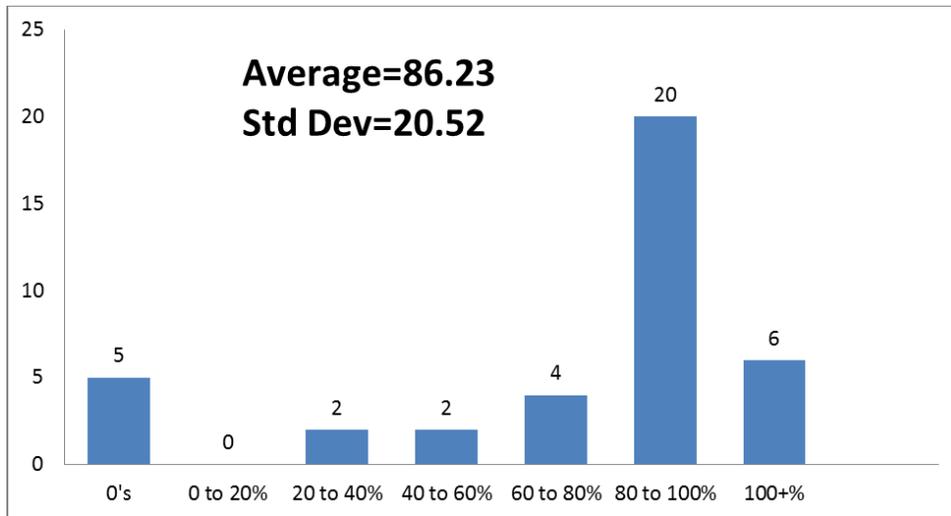


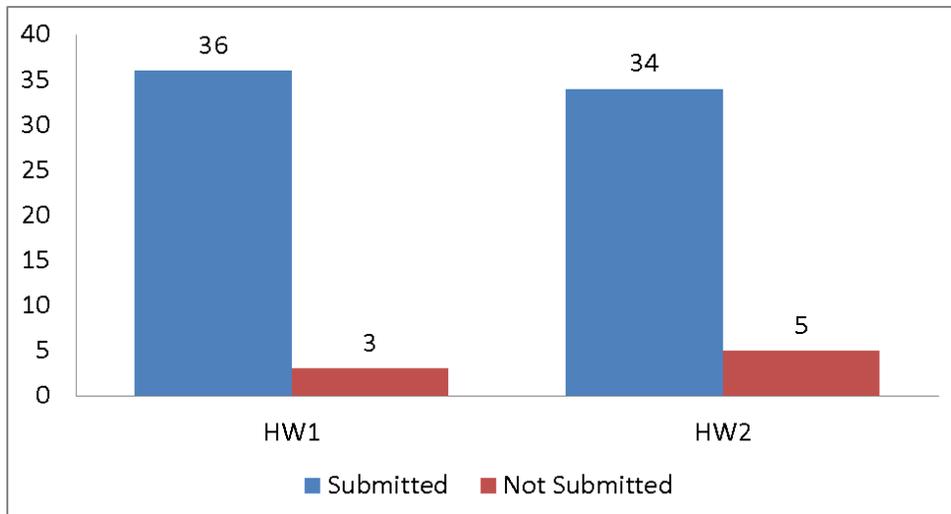
## HW 2 REPORT

	Number of Students
Total	39
Submitted	34
Not Submitted	5

## GRADE DISTRIBUTION



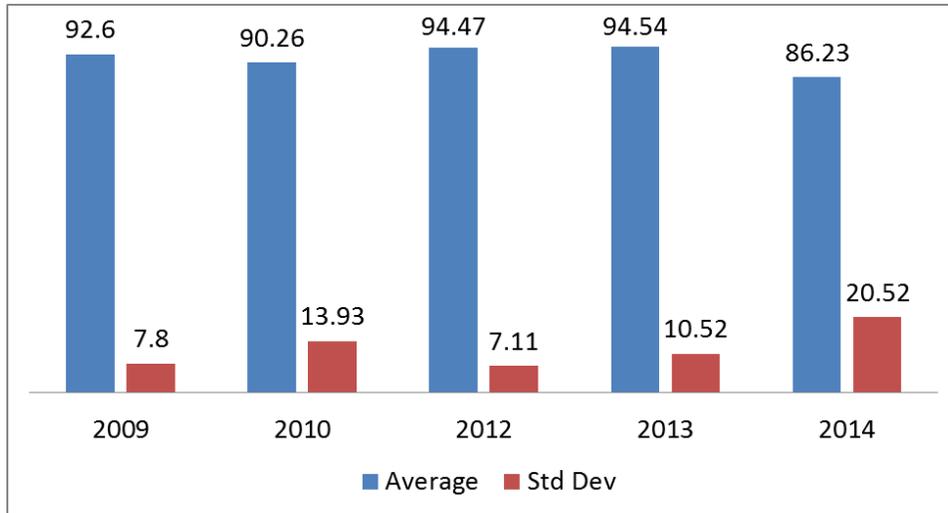
## SUBMISSION HISTORY



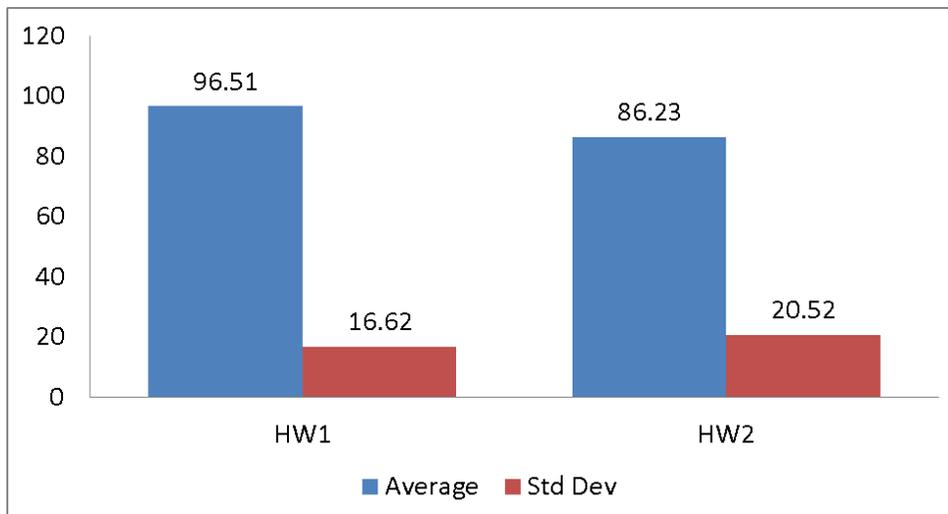
### INDIVIDUAL PROBLEM BREAKDOWN

Problem	2.48	2.79	2.83	2.119	2.127	2.141	2.154	1.83	3.117	4.74	c2.2
Average w/o zeros	9.15	9.68	8.56	8.82	8.13	8.63	7.60	8.35	8.47	5.91	5.51
Std Dev	1.33	1.01	2.63	3.03	3.46	2.79	3.67	2.84	3.59	3.90	4.99

### COMPARISON WITH LAST 4 YEARS



### COMPARISON OF HW 2014



## **SPECIAL COMMENTS**

### **Problem 2.48 - Manometer**

- Students traversed the fluid correctly but did forgot to subtract from the pressure when moving up through the fluid and add when moving down

### **Problem 2.79 – Force Plane Surface**

- Students did not realize the hydrostatic force acts at the center of pressure ( $Y_{cp}$ ) and not the center of mass

### **Problem 2.83 – Force Curved Surface**

- Students did not realize the vertical force acting on gate was due to buoyancy and equals the weight of the displaced water from the gate
- Students did not find the center of mass of the gate properly

### **Problem 2.119 – Buoyancy**

- Students had trouble finding the center of buoyancy of the displace water since the geometry was not simple

### **Problem 2.127 – Stability**

- Students did not solve for both solutions of SG

### **Problem 2.141 – Uniform Acceleration**

- Students used wrong equation for the pressure at the bottom of the tank

### **Problem 2.154 – Rigid Body Rotation**

- Students did not solve for the differential volume and integrate over radius

### **Problem 1.83 – Streamlines**

- Many students solved correctly but plots were lacking, no effort put into plots

### **Problem 3.117 – Uniform Acceleration**

- Most students did excellent on Bernoulli problem

### **Problem 4.74 – Velocity Potential and Stream Function**

- Some students did not attempt
- Issues with solving stream function correctly

## **Comprehensive 2.2 - Manometer**

- Many undergrad students are not doing comprehensive problems
- Student who attempted, almost all got correct solution

## **All Problems**

- Follow formatting laid out in information on website
- Make sure to use units and check for unit homogeneity
- Some students are using the solution manuals too copiously
  - Errors exist in solution manuals, and when found, very easy to spot copiers