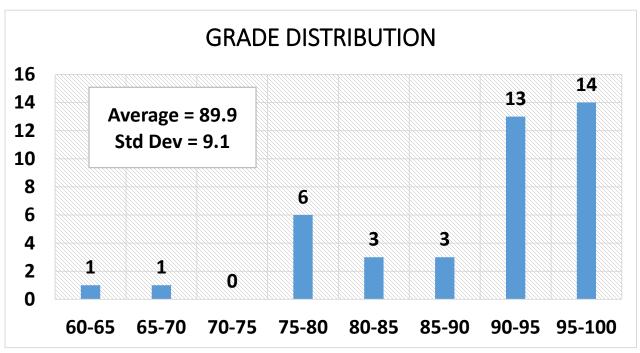
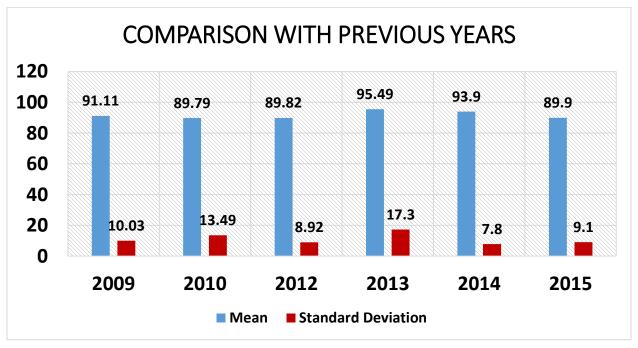
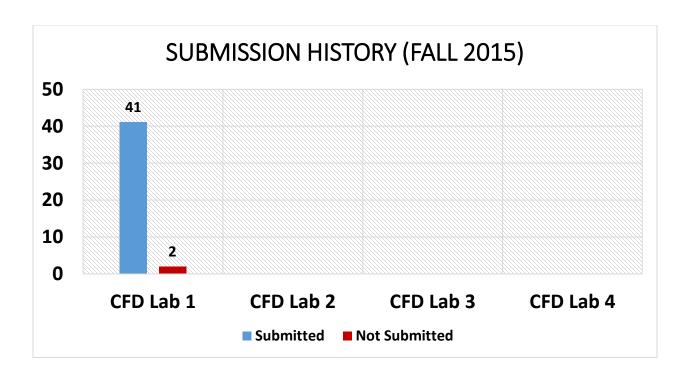
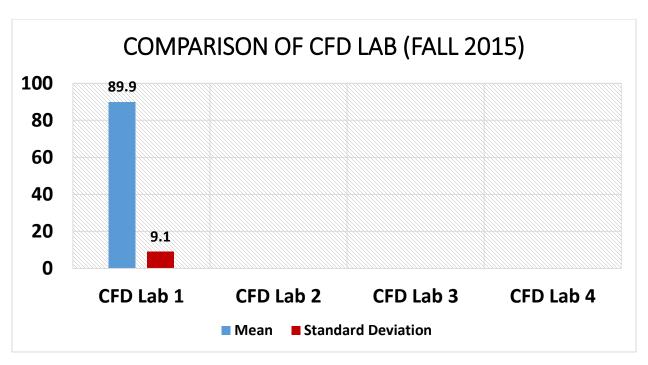
REPORT OF CFD LAB 1

	Number of Students
Total	43
Submitted	41
Not Submitted	2









1) Common Mistakes

- Five students did not follow report instructions found on website
 - O Students that missed points for report sections outside of *Data Analysis and Discussion*, can fix the mistakes and resubmit for full credit by (10/7). This is only allowed of CFD Lab 1, no future leniency will be granted.
- Students struggled with understanding V&V studies.
 - Many students did not use order of accuracy to determine which grid set was closest to asymptotic range.
 - Many students did not analyze change in grid uncertainty to determine which grid set was more sensitive to grid refinement ratio.
 - Many students did not understand that if the relative error is smaller than the grid uncertainty, then the mesh is considered verified.
- Six students forgot to address 8.7.2 from Exercises, covers differences in CFD, EFD, and AFD along with error sources.

2) Feedback

a. Positive

- All students understood the CFD process and were successful running the simulations.
- Many students were satisfied with the lab and felt they benefitted from the lab.

b. Negative

• Some students struggled with setting up the V&V study and analyzing the results.

3) Student Suggestions

- First lab section should be instructor led
- Better examples showing what results should look like
- More detail in explanation of lab manual steps
- More detailed explanation of V&V instruction and meaning of parameters