Seeing Fluid Physics: Outcomes From a Course on Flow Visualization

JEAN HERTZBERG, University of Colorado, Boulder — Since 2003, a course on flow visualization has been offered to mixed teams of engineering and fine arts photography students at the University of Colorado. The most significant outcome of the course is the impact on students’ perceptions; they see fluid physics as ubiquitous in the environment after taking the course. A survey instrument has been developed that explores student perceptions of fluid physics, and has been administered to students in the flow visualization course, and in a traditional junior level fluid mechanics course. Survey results indicate that the students in the flow visualization course notice fluid physics in daily life at an increased rate, and their attitude (affect) towards fluids is improved compared to students in the traditional course. The use of photography in improving student perceptions is being extended to a course on perception of design; preliminary results from a survey on attitudes towards design will be presented. Examples of student images from both courses will be presented as well.