



# FLOW VISUALIZATION: THE PHYSICS & ART OF FLUID FLOW

MCEN 4151/5151/ FILM 4200/ ARTF 5200/ ATLS 4519/5519

**Instructor: Associate Professor Jean Hertzberg**



## ABOUT THE COURSE

Flow visualization is the process of making the physics of fluid flows (gases, liquids) visible. Flow visualization is particularly suited to the interface between art and science. Many fluid physicists are motivated not only by the important scientific and engineering goals of their work, but also by a visceral fascination with their subject. The goals of this course are to encourage engineering students to gain a deeper perception of fluid flow by exploring it for aesthetic and creative purposes, and to offer non-engineering students the chance to explore the beauty of fluid flow and provide exposure to the discipline of documented experimentation. We will explore a range of techniques for creating images and videos of fluid flows, ranging from simple food coloring in water to Mie scattering from aerosols illuminated by laser sheets. For more information visit <http://flowvis.org>, or simply Google 'flow visualization'. Our class site, where all student work is published, is result #1!



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