

## ME308 Sports (or other phenomena) Fluid Mechanics Video Library

### Description

Honors contract student will complete all assignments required in the regular version of the course and will also become content creators/editors for a fluid mechanics video library. (If the library is published online, students who contribute will have a byline that they can include on their CVs/Resumes. The team of students will work under Dr. Wereley's mentorship to create a website in which videos are identified, linked, annotated that illustrate key fluid dynamics principles. These videos may be culled from the internet (subject to fair use rules) or created by the students. Of particular interest to the instructor are sports-related examples, but others are very welcome (natural world, aeronautics, etc. In short, anything that relates fluids to the everyday!).

Each entry in the library should include the video itself (or a link) and an annotation—via Youtube or similar—that 1) identifies the source; 2) identifies and discusses the fluid dynamics illustrated by the video; and 3) relates it to the concepts being covered in ME 308. Students may work independently or in teams, but each student is responsible for contributing at least five annotated entries to the library.

Honors contract students will meet with Dr. Wereley several times throughout the semester (meeting times will be arranged). An end-of-term launch/celebration will be held during quiet week.

### Grading

Participants in this Honors activity will have the same course grade components at the same weights as the rest of the ME308 class as described in the course syllabus but will have the additional 10% assigned to this Honors activity. The total of all the component weights will then be 110%. The course grade will be computed dividing by 110%, in effect devaluing each of the original components by about 10% each.