

Abstract Submitted  
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**Projects in Fluids Courses Made Easy (for You)** JEAN HERTZBERG, University of Colorado Boulder — Projects can provide a number of significant benefits to students in fluids courses at both the graduate and undergraduate levels, but they can be difficult to implement, particularly in large class sections. A major problem is assessment of written project reports, which is very time consuming. Solutions include assigning projects to small teams, formed automatically by CATME.org based on student schedules. This also alleviates the #1 student objection to team projects: scheduling. Other demographics can be used in team formation to ensure inclusiveness. Students are also fearful of the unknown time requirements of a project. A scaffolding approach, breaking the project into small pieces, due at intervals through the semester helps students gain confidence and avoid procrastination. A detailed rubric is essential; it clearly states your expectations and provides a guide to assessment, allowing peer evaluation, the other essential ingredient that saves your time. Peer evaluation must be supported by class time spent on teaching constructive criticism. Anonymous peer evaluation is supported in learning management systems such as Canvas. Automatic plagiarism detection (Turnitin.com) prevents re-use of previous reports, and can be used to teach proper citation behavior. Allowing students to select their own project topics (from a list at least) promotes improved attitudes towards fluid mechanics, including the relevance of fluid physics in their daily lives.

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