

Abstract for an Invited Paper  
for the DFD07 Meeting of  
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**Lectures on Biological Fluid Dynamics**

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In this talk I will show the course outlines for two sixteen-lecture courses that I give to first-year graduate students in applied mathematics at the University of Cambridge in alternate years. One is called “Physiological Fluid Dynamics” and the other “The Fluid Dynamics of Swimming Organisms.” In each case, the main objective of the course is “to demonstrate the application of familiar fluid mechanics to the scientific understanding of important real systems ...” It is assumed that the students have had courses in basic theoretical fluid dynamics, both inviscid and viscous, but that they know next to nothing about biology.