Imperial College London

Module Outline

Fluid Dynamics

Module Code	PHYS96017	FHEQ Level	Level 6
Pre-requisites	None	Co-requisites	None
Primary Department	Physics		
Module Leader	Dr Arnaud Czaja		
Additional Teaching Departments	None		
Teaching Staff	Dr Arnaud Czaja + Associates		

Programmes on which the Module is delivered	Core/Elective
BSc Physics (F300), MSci Physics (F303), BSc Physics with Theoretical Physics (F325), MSci Physics with Theoretical Physics (F390)	Core
MSci Physics with a Year in Europe (F309), BSc Physics with Music Performance (F3W3)	Elective

Learning Outcomes	On completing the Fluid Dynamics course, students will have: • An understanding of basic principles in Fluid Dynamics as well as their applications to several physical environments
Description of Content	• Navier-Stokes equation • Bernoulli's principle • Boundary layer • Viscosity • Vorticity • Laminar and turbulent flow • Drag and lift • Geophysical Fluid Dynamics

Assessment	Assessment Type	Weighting
Written exam	Exam	100%

Learning & Teaching Hours	Independent Study Hours	Placement Hours	Total Hours
16	21.5	0	37.5

ECTS Credit	1.5	CATS Credit	3
Date of introduction	October 2014	Date of Last Revision	April 2020