Global Learning Semesters
Course Syllabus
Course: MATH-464 Fluid Dynamics
Department: Computer Science
Host Institution: University of Nicosia, Nicosia, Cyprus

Course Summary

Course Code	Course Title	Recommended Credit Hours
MATH-464	Fluid Dynamics	3
Semester Offered	**Contact Hours**	**Prerequisites**
Spring	42	MATH 270: Calculus and Analytic Geometry III MATH-430: Partial Differential Equations
Department	**Level of Course**	**Language of Instruction**
Computer Science	Upper Division	English

Course Description

Navier-Stokes Equations, Applications, Flows of near-in viscid fluids, Unidirectional Newtonian Incompressible Laminar Flows, Compressible Flows, Boundary Layer Theory and Hydrodynamic stability

Instructor

Dr George Chailos

Course Aims and Objectives

This course is an introduction to the Mathematical Theory of Fluid Mechanics..

Teaching Methods

The course is delivered through a mixture of lectures, handouts, tutorials, practical exercises and assignments.

Course Teaching Hours

42 hours (42 hours lectures/presentations/tutorials). The course is delivered during the Spring semester in 14-weeks (3 hours/week).

Evaluation and Grading

Class Participation/Homework/Quizzes: 0-30%
Mid-Term(s):   30-50%
Final Exam: 40-50%

Readings and Resources

Required Textbook

Brodkey R.S. , The Phenomena of Fluid Motions, Dover, 1995. (ISBN 0-486-68605-1).