

Discipline	FLUID MECHANICS code15 3 semester – /winter /		
Specialty	NAVAL ARCHITECTURE and MARINE TECHNOLOGY		
ECTS credits: 4	Form of assessment: EXAM		
Lecturer	Assoc. Prof. Anastas Yangyozov Room 410 M Phone: +359 52383371 E-mail: yangyozovtu@tu-varna.bg		
Department	THERMAL ENGINEERING		
Faculty	SHIPBUILDING		
<p>Learning objectives:</p> <p>The course considers the fundamental concepts of the fluid mechanics with introduction to fundamental equations for liquids and gases. The main objective is students to have main theoretical understanding to to analyse and solve complex engineering problems in fluid systems working with compressible and incompressible fluids.</p> <p>Also, course provides details in fluid statics, fluid dynamics, experimental research, pipe systems, wing aerodynamics, similarity laws for fluid problems, etc.</p> <p>The course provides knowledge needed further to make naval architecture students familiar with pipe systems, hydraulic machinery, etc.</p>			
CONTENTS:			
	Training Area	Hours lectures	Hours lab exercises
	Introduction and application of fluid mechanics. Physical properties of fluids.	3	-
	Hydrostatics	10	4
	Fluid kinematics	3	-
	Ideal fluid dynamics	5	5
	Real fluid dynamics	4	4
	Pipe systems	3	-
	Wing aerodynamics . Measurements of pressure and velocity.	2	2
	TOTAL: 45 h	30	15