AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Introduction to Fluid Mechanics								
Course Code	BSM212		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	3	Workload	69 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To achieve and learn some basic knowledge about fluid mechanics								
Course Content	Introduction, sort of the fluid, characteristics of fluids, aim of fluid mechanics, unit of fluid mechanics, hydrostatic, kinematics, hydrodynamics, Lagrange and Euler equations, Linear (laminar) flows, Turbulent flows, analysis of dimension, model and similitude								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)	Assoc. Prof. Ersel YILMAZ								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Lecture notes of the lecturer

Week	Weekly Detailed Course Contents	
1	Theoretical	Introductıon, Common Units, Definition of Fluid, Comparison with Gases and Solids,
2	Theoretical	Physical Properties of Fluids
3	Theoretical	Fluis Statics, Pressure At a Poınt, Pressure Measurements
4	Theoretical	Pressure Varıatıon in A Statıc Fluıd,
5	Theoretical	Forces on Submerged Plane and Curved Surfaces
6	Theoretical	Forces on Submerged Plane and Curved Surfaces
7	Theoretical	Fundamentals Of Fluid Kınematıcs, Unıform Flow And Steady Flow, Streamlınes And Stream Tubes , Lamınar And Turbulent Flow
8	Theoretical	Fundamentals Of Fluid Kınematıcs, Unıform Flow And Steady Flow, Streamlınes And Stream Tubes , Lamınar And Turbulent Flow
9	Theoretical	Equatıon Of Contınuıty
10	Theoretical	Bernoullı’s Equatıon and Applıcatıons of Bernoullı’s Equatıon, (Torricelli’s Theorem, Free Liquid Jet)
11	Theoretical	Applıcatıons of Bernoullı’s Equatıon, , Venturimeter, Pitot Tube
12	Theoretical	Impulse-Momentum Equation
13	Theoretical	Application of The Impulse-Momentum Equation
14	Theoretical	Dımensıonal Analysıs
15	Theoretical	Dımensıonal Analysıs
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Midterm Examination	1	5	1	6
Final Examination	1	6	1	7
			Total Workload (Hours)	69
			[Total Workload (Hours) / 25*] = **ECTS**	3
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Understanding the properties of fluids

2	Understanding the basics of Fluid statics
3	Formulating the essential data needed for project designs
4	Solving flow problems and being able to make necessary sizings for a system
5	Applıcatıons of Bernoullı's Equatıon, Venturimeter, Pitot Tube