COURSE DESCRIPTION FORM						
Course Code and Title	CE371 FLUID MECHANICS					
Semester	5					
Catalog description	Dimensions and Units;Properties of Fluids;Pressure at a Poin Pressure Variation in a Fluid at Rest; Measurement of Pressure					
	Hydrostatic Pressure and Forces on Plane and Curved Surface Buoyancy;Pressure Variation in a Fluid with Rigid-Bo					
	Motion; Fluid Kinematics; Eulerian and Lagrangian Fl					
	and Pathlines; The Reynolds Transport Theorem; System and Control Volume Representations; Continuity Equation Momentum Equation, Energy and Bernoulli Equations					
Required reading	Munson, B. R., Young, D. F., andOkiishi, T. H., 'Fundamentals of Fluid Mechanics', John Wiley&Sons, Inc.					
Recommendedreading	1-Streeter V.L. andWylie B., 'Fluid Mechanics', McGrawHill. 2-Nuri Yücel ve diğerleri "Akışkanlar Mekaniğine Giriş"					
	yardımcı ders kitabı no: 1 tercümesi, Nobel yayınevi. 3-Shames I., 'Mechanics of Fluids', McGrawHill.					
	4- Kırkgöz, Salih, "Akışkanlar Mekaniği"					
	6-Ronalds V.G., 'Akışkanlar Mekaniği ve Hidrolik', Sanem					
	Çözümlü Serisi.					
	7- Ilgaz C., Karahan E., Bulu A., 'Akışkanlar Mekaniği ve					
	8- Cengel Y.A, Cimbala J.M, "Akıskanlar Mekaniği- Temelleri					
	ve Uygulamaları" Palme Yayınevi					
	9-Şekerdağ, N. "Akışkanlar Mekaniği ve Hidrolik Problemleri"					
ECTS	Nobel Yayın Dagitim					
ECIS Prerequisites and co-requisites	Depending of this course is: CE223 MECHANICS I					
Trerequisites and co-requisites	(STATICS)					
	Required attendance to lectures is at least 70% of total term					
	hours.					
Compulsory/Elective	Compulsory					
Language of instruction	English To introduce the fluid behaviour, to teach the basic concepts and					
Ann or course	principles of Fluid Mechanics for static and moving fluids.					
Learning outcomes of the course unit						
Mode of delivery	The mode of delivery of this course is face to face.					
Course content	1. Dimensions and Units					
	<ol> <li>Properties of Fluids</li> <li>Pressure at a Point Pressure Variation in a Fluid at</li> </ol>					
	Rest, Measurement of Pressure					
	4. Hydrostatic Pressure and Forces on Plane and Curved Surface					
	5. Buoyancy					
	6. Pressure Variation in a Fluid with Rigid-Body Motion					
	7. Pressure Variation in a Fluid with Rigid-Body Motion and 1 Midterm					
	8. Fluid Kinematics; Eulerian and Lagrangian Flow					
	Descriptions					
	9. Velocity, Acceleration, Streamlines, Streaklines and Pathlines					
	10. The Reynolds Transport Theorem. System and Control					
	Volume Representations					

	11. Continuity Equation									
	12. Momentum Equation									
	13. 2. Midterm									
	14. Energy and Bernoulli Equations									
	15. Energy Lines									
Planned learning activities and teaching	3 theoretical lecture hours per week (3+0)									
methods	Web search and library use									
	Works for assignments									
	Midterm exams and related works									
	Final exam and related works									
Assessment methods and criteria			Ouantity	ty Percentage (						
	Mid	l-terms	2		50			<u> </u>	,	
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	Exe	rcises	_	-						
	Pro	iects	-							
	Pra	ctice	-							
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	Fina	al Examination		-0						
	to C	to Overall Grade								
	(%)	(%)								
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		and conditions, in such a way as to meet the							
		desired result; ability to apply modern design							
	4	methods for this purpose.				v			
	4	Ability to devise, select, and use modern				Х			
		and solving complex problems encountered							
		in civil angingering practice: ability to							
		amploy information technologies and to use							
		at least one computer programming language							
		effectively							
	5	Ability to design and conduct experiments			x				
	5	gather data analyze and interpret results for			Λ				
		investigating complex civil engineering							
		problems or discipline specific research							
		questions							
	6	Ability to work efficiently in intra-				x			
	0	disciplinary and multi-disciplinary teams				23			
	7	Ability to work individually					X		
	,	Ability to work individually.					21		
	8	Ability to communicate effectively in		Х					
		Turkish, both orally and in writing; ability to							
		write effective reports and comprehend							
		written reports.							
	9	Knowledge of English of B1 level according					Х		
		to Common European Framework of							
		Reference.							
	10	Prepare design and production reports, make	Х						
		effective presentations, and give and receive							
		clear and intelligible instructions.							
	11	Recognition of the need for lifelong learning;					Х		
		ability to access information, to follow							
		developments in science and technology, and							
		to continue to educate him/herself.							
	12	Consciousness to behave according to ethical					Х		
		principles and professional and ethical							
		responsibility.							
	13	Knowledge on standards used in civil					Х		
		engineering practice.			••				
	14	Knowledge about business life practices			Х				
		such as project management, risk							
	15	Amanagement, and change management.					v		
	15	Awareness in entrepreneursnip, innovation;					л		
	16	Knowledge about sustainable development.					v		
	10	effects of engineering practices on bealth					Λ		
		environment and safety and contemporary							
		issues of the century reflected into the field							
		of engineering.							
	17	Awareness of the legal consequences of	X						
	1,	engineering solutions.							
Name of lecturer and contact information	Prof	Dr. Osman Nuri Özdemir	ozde	mira	noar	vi ed	11 fr		
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