

## FLUID MECHANICS

<b>1</b>	Course Title:	FLUID MECHANICS
<b>2</b>	Course Code:	BSM2807
<b>3</b>	Type of Course:	Compulsory
<b>4</b>	Level of Course:	First Cycle
<b>5</b>	Year of Study:	2
<b>6</b>	Semester:	3
<b>7</b>	ECTS Credits Allocated:	4.00
<b>8</b>	Theoretical (hour/week):	2.00
<b>9</b>	Practice (hour/week):	1.00
<b>10</b>	Laboratory (hour/week):	0
<b>11</b>	Prerequisites:	none
<b>12</b>	Language:	Turkish
<b>13</b>	Mode of Delivery:	Face to face
<b>14</b>	Course Coordinator:	Prof. Dr. ALİ VARDAR
<b>15</b>	Course Lecturers:	YOK
<b>16</b>	Contact information of the Course Coordinator:	Prof. Dr. Ali Vardar e-posta: dravardar@uludag.edu.tr Telefon: 0 224 2941605 Adres: Bursa Uludağ Üniversitesi, Ziraat Fakültesi, Biyosistem Mühendisliği Bölümü, Görükle Kampüsü, 16059, Nilüfer/BURSA
<b>17</b>	Website:	
<b>18</b>	Objective of the Course:	Give the basic concepts of fluid mechanics, examine the state of hydrostatic stagnant fluids, the conservation equations to give fluids to crawl, to examine the flow in open channels, to the methods of measurement of fluids.
<b>19</b>	Contribution of the Course to Professional Development:	It contributes to the student's understanding of professional issues in upper classes.
<b>20</b>	Learning Outcomes:	
	<b>1</b>	Learn basic concepts of fluid mechanics
	<b>2</b>	Stagnant fluids to detect the status of the hydrostatic
	<b>3</b>	Learn the conservation equations
	<b>4</b>	Grasp the continuity equation
	<b>5</b>	
	<b>6</b>	
	<b>7</b>	
	<b>8</b>	
	<b>9</b>	
	<b>10</b>	
<b>21</b>	Course Content:	
	<b>Course Content:</b>	
Week	Theoretical	Practice
<b>1</b>	Introduction, Importance and Topics of Fluid Mechanics	Sample Solution
<b>2</b>	Basic concepts	Sample Solution
<b>3</b>	Basic concepts	Sample Solution

<b>4</b>	Properties of Fluids	Sample Solution
<b>5</b>	Properties of Fluids	Sample Solution
<b>6</b>	Properties of Fluids	Sample Solution
<b>7</b>	Repetition of course	Sample Solution
<b>8</b>	Pressure and Fluid Statics	Sample Solution
<b>9</b>	Pressure and Fluid Statics	Sample Solution
<b>10</b>	Fluid Kinematics	Sample Solution
<b>11</b>	Conservation Equations - General Topics and Energy Equations	Sample Solution
<b>12</b>	Conservation Equations - Bernoulli Equations	Sample Solution
<b>13</b>	Conservation Equations - Bernoulli Equations	Sample Solution
<b>14</b>	Conservation Equations - Continuity Equations	Sample Solution
<b>22</b>	Textbooks, References and/or Other Materials:	Çengel, Y.A, Cimbala J.M., 2010. Akışkanlar Mekaniği Temelleri ve Uygulamaları (3. Baskı), Palme Yayıncılık, İstanbul.
<b>23</b>	Assesment	
<b>TERM LEARNING ACTIVITIES</b>		<b>NUMBER</b>
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade	40.00	
Contribution of Final Exam to Success Grade	60.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course	Midterm Exam, Homework and Final Exam	

#### **24 ECTS / WORK LOAD TABLE**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	1.00	14.00
Self study and preperation	14	3.00	42.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	1.00	1.00
Others	0	0.00	0.00
Final Exams	1	30.00	30.00
Total Work Load			115.00
Total work load/ 30 hr			3.83
ECTS Credit of the Course			4.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK2	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK3	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
ÖK4	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives    PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			