

# LAND SURVEYING

<b>1</b>	Course Title:	LAND SURVEYING	
<b>2</b>	Course Code:	BSM1514	
<b>3</b>	Type of Course:	Compulsory	
<b>4</b>	Level of Course:	First Cycle	
<b>5</b>	Year of Study:	1	
<b>6</b>	Semester:	2	
<b>7</b>	ECTS Credits Allocated:	2.00	
<b>8</b>	Theoretical (hour/week):	2.00	
<b>9</b>	Practice (hour/week):	2.00	
<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. KEMAL SULHİ GÜNDOĞDU	
<b>15</b>	Course Lecturers:	Doç.Dr. Müge Kirmikil	
<b>16</b>	Contact information of the Course Coordinator:	Tel: +90 224 29 41 620 E-posta: kemalg@uludag.edu.tr Adres: Uludağ Üniversitesi, Ziraat Fakültesi, Biyosistem Mühendisliği Bölümü, Görükle Kampüsü, 16059, Nilüfer/BURSA	
<b>17</b>	Website:		
<b>18</b>	Objective of the Course:	It provides the ability to understand the basic measurement principles, to make measurements in the field, to use developed measuring instruments, to obtain land-based data through engineering projects and to apply the projects to the field.	
<b>19</b>	Contribution of the Course to Professional Development:	Understand the principles of land surveying	
<b>20</b>	Learning Outcomes:		
		<b>1</b>	Ability to make basic land measurements and work with basic measuring instruments to obtain data in agricultural engineering;
		<b>2</b>	Ability to perform coordinated measurement operations;
		<b>3</b>	Gain the ability to read and interpret topographic maps
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<b>21</b>	Course Content:		
		<b>Course Content:</b>	
Week	Theoretical	Practice	
<b>1</b>	Introduction	Introduction	
<b>2</b>	Measurement Information Definition, Content, Historical Development and Measurement Types	Measurement Information Definition, Content, Historical Development and Measurement Types	

3	Units of Measurement and Scale	Units of Measurement and Scale
4	Area Measurement Methods, Area Measurement with Planimeter	Area Measurement with Planimeter
5	Vertical Distance (Height) Measurement and Leveling Tools	Vertical Distance Measuring and Leveling Devices Introductions
6	Nivelman Uygulamaları ve Hesabı	Leveling Applications and Calculation
7	Eş Yükseklik Eğrilerinin Çizimi	Drawing of Contour Curves
8	Interpretation of Topographic Maps	Interpretation of Topographic Maps
9	Datum, Coordinate and Projection Systems	Datum, Coordinate and Projection Systems
10	Global Positioning Systems (GPS)	Applications of Global Positioning Systems in the Field
11	Introducing Theodolite and Total Station	Theodolite and Total Station Land Applications
12	Coordinate Calculations	Coordinate Calculation Application
13	Poligon Hesabı Uygulaması	Polygon Calculation Application
14	Arazi Uygulaması	Land Application
22	Textbooks, References and/or Other Materials:	<p>Ayyıldız, M. 1985. Ölçme Bilgisi, Ankara Üniversitesi Ziraat Fakültesi Yayını N.:952</p> <p>Balcı, A. ve M. Avcı, 1998. Ölçme Bilgisi-1, Ege Üniversitesi, Ziraat Fakültesi yayınları, No:532, Bornova, İzmir.</p> <p>Bektaş Sebahattin.2009; Pratik Jeodezi, OMU, Samsun Gündoğdu, KS, Büyükcangaz H, Kirmikil M., 2020. Ölçme Bilgisi, Dora Yayınları</p> <p>Özbenli, Erdoğan ve Tüdeş, Türkay. 1997; Ölçme Bilgisi, KTÜ Yayınları, Genel yayın no 87, Trabzon</p> <p>Yağanoğlu, V. ve ark.1991. Ölçme Bilgisi-1 (Uygulama Ders Notu). Atatürk Üniversitesi Ziraat Fakültesi Ders Yayınları, No:116, Erzurum</p> <p>Yazgan, S., Gündoğdu, K.S., 2000. Mühendislik Ölçmeleri ders notu.</p> <p>Yüksel, A.N, 1991. Ölçme Bilgisi, Trakya Üniversitesi, Tekirdağ Ziraat Fakültesi, Yayın no:112, Tekirdağ.</p>
23	Assesment	
<b>TERM LEARNING ACTIVITIES</b>		
	<b>NUMBE R</b>	<b>WEIGHT</b>
Midterm Exam	1	20.00
Quiz	1	10.00
Home work-project	12	10.00
Final Exam	1	60.00
Total	15	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		There will be a classical exam and a practical exam.
24	<b>ECTS / WORK LOAD TABLE</b>	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	0	0.00	0.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	2.00	2.00
Others	0	0.00	0.00
Final Exams	1	2.00	2.00
Total Work Load			60.00
Total work load/ 30 hr			2.00
ECTS Credit of the Course			2.00

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	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>LO: Learning Objectives    PQ: Program Qualifications</b>																
<b>Contribution Level:</b>	<b>1 very low</b>			<b>2 low</b>			<b>3 Medium</b>			<b>4 High</b>			<b>5 Very High</b>			