Course Syllabus

Code - Course Title	**BOP110 - Introduction to Algorithm and Programming**
Course Type	II. SEMESTER
Laboratory + Practice	2+1
ECTS	**2.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	ÖĞR. GÖR. MELDA BEYAZ KORKUT

Mode of Delivery	face to face
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	None
Recommended Resources	1. Vatansever, F. Introduction to Algorithm Development and Programming. Ankara: Seçkin Yayıncılık.2. Official Python Documentation – Tutorial Section (online, docs.python.org).3. Course notes, sample codes, and exercise files prepared by the instructor.
Work Placement	None
Aims of the Course	The objective is to enable students to break down a problem into solution steps and express them using algorithms and flowcharts, and to write simple programs and debug them using basic programming structures (variables, operators, decision structures, and loops).

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Teaching problem solving principles	
Week - 2		Teaching algorithms and flow charts. Transforming algorithms to flow charts	
Week - 3		Doing applications about algorithms and flow charts.	
Week - 4		Teaching Using the programming environment and code writing rules	
Week - 5		Finding errors by doing applications	
Week - 6		Finding errors by doing applications	
Week - 7		Teaching variables used in the programme	
Week - 8		Writing code programme	
Week - 9		Teaching loops and control commands used in the programme	
Week - 10		preparing sample programmes by Using control expression and loops	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 11		preparing sample programmes by Using control expression and loops	
Week - 12		Examples of applications	
Week - 13		Examples of applications	
Week - 14		Examples of applications	

Learning Outcomes

#	Learning Outcome
1	Can decompose a problem into sub-steps according to the stages of the solution process.
2	Can model the algorithm of a given problem using a flowchart.
3	Can test a flowchart using sample data.
4	The student can use variables, data types, and operators in simple calculation programs.
5	Can correct syntax and logic errors in the program.
6	Can develop programs that solve a problem using decision structures and loops.
7	The student can take responsibility for adhering to readability and organization rules while writing code.

Sustainable Development Goals

✓ Decent Work and Economic Growth

Course Theme

✓ Software, Cloud and Blockchain

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	2.00	14	28
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0.00	0	0
Ödevler	3.00	1	3
Proje - Rapor - Sunum Hazırlama	0.00	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	2.00	1	2
Final Sınavı Hazırlığı (sınav süresi dahil)	3.00	1	3
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	1.00	14	14
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**2.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Multiple Choice Test ✓ Homework

Community Service Activity

This course does not include any Community Service activities.