## Course Syllabus

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| **Code - Course Title** | **BİL106U -** |
| **Course Type** | II. SEMESTER |
| **Laboratory + Practice** | 0+0 |
| **ECTS** | **6.0** |
| **Language of Instruction** | Türkçe |
| **Course Type** | Required Courses |
| **Course Instructor(s)** | Assoc. Prof. Dr. Yusuf Levent ŞAHİN |

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|---|---|
| **Mode of Delivery** | Distance Education |
| **Prerequisites** | There is no prerequisite or co-requisite for this course. |
| **Courses Recomended** | There is no recommended optional programme component for this course. |
| **Recommended Resources** | BIL107U PROGRAMLAMA I |
| **Work Placement** | Not Applicable |

## Course Syllabus

| Weeks | Learning Outcomes | Topics | Teaching Methods |
|---|---|---|---|
| **Week - 1** | | Introduction to Algorithm and Programming: Algorithm, Flowchart, Pseudo code, Software development process, Algorithm examples from daily life. | |
| **Week - 2** | | .net Core Technology And C# Programming Language Introduction: What is a program, Programming languages, Structured programming and object-oriented programming, C# and .Net platform. | |
| **Week - 3** | | Basic Concepts: Features of C# programming language, Variables and constants, Data types. | |
| **Week - 4** | | Basic Concepts: Basic operations (operators), Flow control structures, Array structures (array). | |
| **Week - 5** | | C# Program Structure: Methods, Math class. | |
| **Week - 6** | | C# Program Structure: Collection class, String class. | |
| **Week - 7** | | Midterm. | |
| **Week - 8** | | File Operations With C#: File operations, Input/output functions, Console operations. | |
| **Week - 9** | | Introduction To Object Oriented Programming: Class concept. | |
| **Week - 10** | | Introduction To Object Oriented Programming: Access modifiers, Extension methods. | |
| **Week - 11** | | Object Oriented Concepts I: Inheritance, Class coupling, Encapsulation, Generics. | |
| **Week - 12** | | Object Oriented Concepts II: Polymorphism, Abstract class and members. | |
| **Week - 13** | | Object Oriented Concepts II: Sealed class and members, Interface, Exception handling. | |

## Course Syllabus

| Weeks | Learning Outcomes | Topics | Teaching Methods |
|---|---|---|---|
| Week - 14 | | Final Exam. | |

## Learning Outcomes

| # | Learning Outcome |
|---|---|
| 1 | Be able to explain the basic concepts of algorithm. |
| 2 | Be able to define the basic concepts of programming. |
| 3 | Be able to discover the features of C# programming language. |
| 4 | Be able to create examples suitable for C# program structure. |
| 5 | Be able to perform file operations with C#. |
| 6 | Uses the structures of object-oriented programming in solving a given problem. |

## Sustainable Development Goals

*No content has been provided.*

## Course Theme

*No content has been provided.*

## AKTS Workload

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

## Assessment Method and Passing Requirements

*No content has been provided.*

| Assessment Method and Passing Requirements | Quamtity | Percentage (%) |
|---|---|---|
| 1.Midterm Exam | 1 | 30 |
| Final Exam | 1 | 70 |
| | **Sum (%)** | **100** |