| Course Description |  |
| :--- | :--- |
| Course Code | YZ 108 |
| Course Name |  |
| Prerequisite Courses | The English |
| Language of the Course |  |
| Course Coordinator |  |
| Instructor(s) |  |
| Course Assistants | Advancing in functional programming and an introduction to object-oriented programming. |
| The aim of the course | Implementing interfaces and programs using a visual and object-oriented programming language. |
| Course Content |  |

## Weekly Course Content

Week 1 Net environment, coding and compiling, windows in .net
Week 2 Console class, declare variables, arrays, loops, conditional statements, an application: getting class notes and calculating the class mean
Week 3 An application: dice game, writing classes, methods, calling class methods, an application: phonebook, an application: Math library
Week 4 Constructor (An application: Time Class), writing Class -2 An application: deck class, shift deck methods
Week 5 Array List, An Application: Student notes, foreach structure, Array List.Sort, exception handling (try/catch/finally)
Week 6 Windows Forms Application, property and event usage, An application: an interface design for a booking system
Week 7 Graphic library, An application: drawing with mouse moves
Week 8 Midterm exam
Week 9 Writing/ Reading stream files, An application: Booking system based on txt file, query in files
Week 10 OpenFileDialog, SaveFileDialog, MessageBox components, An Application:notepad
Week 11 Introduction to Database design and normalization, Query db tables using SQL
Week12 ADO.Net components for connecting Dbs, and executing queries, components for listing results, An Application: Booking system using DB
Week 13 Web components, A password-protected web application using ASP.NET
Week 14 An Application: online shopping website
Week 15 Final exam

## Course Learning Outcomes

| 1 | Introduction to computer programming |
| :--- | :--- |
| 2 | Sql connection |
| 3 | Graphics |
| 4 | - |
| 5 | - |
| 6 | - |

## Contribution of the Course to Program Qualifications

01 The student will have the ability to apply analytical approach, mathematics and science knowledge in software and engineering issues. 02 The student will have the ability to identify, define, formulate and solve a problem in software and computer systems
03 Thect process.

| 04 | The student will have the ability to use the design capability, techniques and tools required for engineering applications. |
| :--- | :--- |
| 05 | The student will have the ability to design, implement and interpret experimental work and software projects by analyzing the results. |

06 The student will have the ability to work between disciplines and teamwork.
07 The student will have the ability to work in international environments and adapt to different cultures.
08 The student will have verbal and written communication skills in Turkish and English.
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09 The student will have the awareness of the necessity of lifelong learning and the ability to realize it.
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10 The student will gain knowledge of legal issues with the awareness of professional and ethical responsibility
11 The student will have managerial skills (leadership, organization, time and risk management, quality awareness, efficiency, etc.).
12 The student will have the ability to participate in social activities, to acquire regular sports habits and to use time in the best way.
13 The student will have the ability to find unusual ways and produce projects.
14 The student will have professional self-confidence, being an entrepreneur and taking initiative
15 It is sensitive about the problems of the age and looks after the national interests.

## ECTS WORKLOAD

|  | Number | Duration (hours) | Number*Duration |
| :---: | :---: | :---: | :---: |
| Face to face education | 14 | 3 | 42 |
| Out-of-class study time (pre-study, reinforcement) | 14 | 1 | 14 |
| Homeworks | 8 | 3 | 24 |
| Presentation / Seminar preparation | 1 | 3 | 3 |
| Quizzes | 0 | 0 | 0 |
| Preparation for midterm exams | 1 | 8 | 8 |
| midterm exams | 1 | 2 | 2 |
| Project (Semester assignment) | 1 | 10 | 10 |
| Lab | 14 | 2 | 28 |
| field work | 0 | 0 | 0 |
| Preparation for the final exam | 1 | 10 | 10 |
| Semester final exam | 1 | 2 | 2 |
| Research | 14 | 1 | 14 |
| TOTAL WORKLOAD |  |  | 157 |
| ECTS |  |  | 5 |
| Evaluation |  |  |  |
| SEMESTER EVALUATION |  | Number | Contribution Percentage |
| Midterm |  |  | 120 |
| Quiz |  |  | $0 \quad 0$ |
| Homework |  |  | $8 \quad 20$ |
| SEmester total |  |  | 40 |
| Contribution rate of mid-term evaluations to success |  |  | 40 |
| Contribution rate of the final exam to success |  |  | 60 |
| GRAND TOTAL |  |  | 100 |

RESOURCES

