

BASIC PROGRAMMING

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| 1 | Course Title: | BASIC PROGRAMMING |
| 2 | Course Code: | BIL2103 |
| 3 | Type of Course: | Compulsory |
| 4 | Level of Course: | First Cycle |
| 5 | Year of Study: | 2 |
| 6 | Semester: | 3 |
| 7 | ECTS Credits Allocated: | 4.00 |
| 8 | Theoretical (hour/week): | 2.00 |
| 9 | Practice (hour/week): | 2.00 |
| 10 | Laboratory (hour/week): | 0 |
| 11 | Prerequisites: | - |
| 12 | Language: | Turkish |
| 13 | Mode of Delivery: | Face to face |
| 14 | Course Coordinator: | Dr. Öğr. Üyesi ÖMER UYSAL |
| 15 | Course Lecturers: | |
| 16 | Contact information of the Course Coordinator: | e-posta: omeruysal@uludag.edu.tr Tel: 224 2955027 Adres: Bursa Uludağ Üniversitesi Eğitim Fak. Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü A Blok, Kat:3 Oda No: 308 Görükle Yerleşkesi 16059 Görükle/ BURSA |
| 17 | Website: | https://ukey.uludag.edu.tr/p!UIRDXFhbCHhbVzNaXxFRKVZMQi4pL1YxeH0hR0sf!/ |
| 18 | Objective of the Course: | The purpose of this course is to give teacher candidates fundamental information about basic concepts of programming such as variables, data structures, algorithm, decision structures and loops. In addition giving teacher candidates the basic competencies necessary to develop software is another purpose of that course with using C programming language. |
| 19 | Contribution of the Course to Professional Development: | It enables them to use the theories and applications specified in the purpose of the course in their professional practice. |
| 20 | Learning Outcomes: | |
| | 1 | Knows the algorithm and flow chart.. |
| | 2 | Knows historical development of programming languages. |
| | 3 | Identifies data structures and variables, also explains the purpose to use them. |
| | 4 | Uses decision structures. |
| | 5 | Uses conditional loops. |
| | 6 | Codes subroutines and functions. |
| | 7 | Uses arrays. |
| | 8 | Stores, reads and modifies the persistent data using files. |
| | 9 | |
| | 10 | |
| 21 | Course Content: | |
| | Course Content: | |
| Week | Theoretical | Practice |
| 1 | Programming and basic concepts | |
| 2 | Introduction to C | |

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|------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | Variables, Constants and Operators | Applications of Variables, Constants and Operators |
| 4 | Control Structures | Applications of If..Else..End If |
| 5 | Loops | Applications of For Next |
| 6 | Loops | Applications of Do Loop |
| 7 | Functions and Structural Programming | Applications of Functions and Structural Programming |
| 8 | Arrays | Applications of Arrays |
| 9 | Pointers | Applications of Pointers |
| 10 | Strings | Applications of Strings |
| 11 | Structures | Applications of Structures |
| 12 | Structures | Applications of Structures |
| 13 | File Operations | Applications of File Operations |
| 14 | File Operations | Applications of File Operations |
| 22 | Textbooks, References and/or Other Materials: | <p>Taşbaşı, G. M. (2005). Basic C Programming. İstanbul: Altaş Press.</p> <p>Taşbaşı, G. M. (2014). Advanced C Programming. İstanbul: Altaş Press.</p> <p>Arslan, R. S., Azginoğlu, N. ve Taşyürek, M. (2022). C ile Programlama Başlangıçtan İleri Seviyeye. Ankara: Nobel Akademik Yayıncılık.</p> |
| 23 | Assesment | |
| TERM LEARNING ACTIVITIES | | NUMBER |
| Midterm Exam | | 1 |
| Quiz | | 0 |
| Home work-project | | 5 |
| Final Exam | | 1 |
| Total | | 7 |
| 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 | | Process evaluation will be applied during the period. Practical exam method will be applied in midterm 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 | 2.00 | 28.00 |
| Self study and preperation | 14 | 1.00 | 14.00 |
| Homeworks | 0 | 0.00 | 0.00 |
| Projects | 13 | 1.00 | 13.00 |
| Field Studies | 0 | 0.00 | 0.00 |
| Midterm exams | 1 | 16.00 | 16.00 |
| Others | 0 | 0.00 | 0.00 |
| Final Exams | 1 | 21.00 | 21.00 |
| Total Work Load | | | 120.00 |
| Total work load/ 30 hr | | | 4.00 |
| 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 | 5 | 5 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |
| ÖK2 | 4 | 0 | 4 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| ÖK3 | 5 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| ÖK4 | 5 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| ÖK5 | 5 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| ÖK6 | 5 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| ÖK7 | 5 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| ÖK8 | 4 | 4 | 3 | 5 | 0 | 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 | | | |