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| ***ÇAĞ UNİVERSİTY******Vocational Schools – Department of Foreign Trade*** |
| Course Code | Course Title | Credits | ECTS |
| MAT143 | Mathematics | 2 (2-0-2) | 5 |
| Prerequisites | None |
| Language | Turkish | **Mode of Delivery**  | Face-to Face |
| **Type and Level of Course** | Compulsory, 1st year, fall semester |
| **Course Coordinator** | Lecturer Betül Aktaş | **Lecture hours** | **Office Hours** | **e-mail** |
| Wedn.13:25-14:55 | Monday 12:00-13:00 | **betulaktas@cag.edu.tr** |
| **Course Objective** | Understand mathematical concepts and systems, to be able to use them in daily life and other fields, to gain the mathematical knowledge and skills necessary for further education in any field. |
| **Learning Outcomes of the Course** |  | A student who successfully completes the course; | **Relationship** |
| **Program Outcome** | **Net Effect** |
| 1 |  Understand mathematical concepts. |  1 & 2  | **5 & 3** |
| 2 |  Identify sets of numbers. | 1 & 2 | **5 & 3** |
| 3 |  Correctly apply procedural steps. | 1 & 2 | **5 & 3** |
| 4 | Gain analytical thinking skills. | 1 & 2 | **5 & 3** |
| 5 |  Discover connections between number sets. | 1 & 2 | **5 & 3** |
| 6 |  Establish relationships among numbers. | 1 & 2 | **5 & 3** |
| 7 |  Provide quantitative examples for everyday discussion topics. | 1 & 2 & 7 | **5 & 4 & 3** |
| **Course Description:** The aim of this course is to understand mathematical concepts and systems, apply them in daily life and other fields, and acquire the mathematical knowledge and skills necessary for advanced education in any field. |
| **Course Contents: ( Weekly Lecture Plan )** |
| **Weeks** | **Topics**  | **Preparation** | **Teaching Methods** |
| 1 | Basic Concepts and Number Sets | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 2 | Base Arithmetic | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 3 | Rational Numbers | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 4 | Decimal Numbers | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 5 | Exponential Numbers | Combination of textbook and ref. books suggested | Explaining, giving examples, practices rme |
| 6 | Radical Numbers  | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 7 | Midterm Exam | All sources | Application |
| 8 | Algebraic Operations and Identities | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 9 | Linear Equations (Part I) | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 10 | Linear Equations (Part II) | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 11 | Functions (Part I) | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 12 | Functions (Part II) | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 13 | Logarithms | Combination of textbook and ref. books suggested | Explaining, giving examples, practices |
| 14 | Sample Problem Solving | All sources | Giving examples, practices |
| 15 | General Review | All sources | Giving examples, practices |
| 16 | **Final exam** | All sources | Application |
| **REFERENCES** |
| **Text Book** | Mathematics for Vocational Schools by Lecturer Dr. Birkan Durak; Nobel Publishing; ISBN: 978-625-406-872-0; Ankara, 2021 |
| **Reference Book** | 1) Basic Mathematics; Lisans Publishing; ISBN: 9978-9944-274-87-6; Istanbul, 20092) Mathematics; Lisans Publishing; ISBN: 978-605-4350-48-3; Istanbul, 2011 |
| **Lecture Notes** | Lecture notes and application documents |
| **ASSESSMENT METHODS** |
| **Activities** | **Number** | **Hours** | **Notes** |
| **Midterm Exam**  | **1** | **%40** |  |
| **Final exam** | **1** | **%60** |  |
| **ECTS TABLE** |
| **Contents** | **Number** | **Hours** | **Total** |
| Theoretical Course Hours | **14** | **2** | **28** |
| Practical Course Hours: | **14** | **2** | **28** |
| Self Study | **14** | **3** | **42** |
| Internet/library Research | **10** | **2** | **20** |
| Application Practice | **4** | **3** | **12** |
| Midterm and Preparation | **1** | **8** | **8** |
| Final Exam and Preparation | **1** | **12** | **12** |
| **Total****Total / 30****ECTS Credit** | **120** |
| **=150/30=5** |
| **5** |

**RECENT PERFORMANCE TABLE**