MATH 103 GENERAL MATHEMATICS
COURSE SYLLABUS
2025-2026 Fall Semester

Course Instructors: Hamide Suluyer (Sec 1), Ayşe Doğan Çalışır (Sec 2).

Course Content: Arithmetic Operations, The Decimal System, Factors, Fractions, Approximations, Percentages, Ratio and Proportion, Area and Volume of Some Geometrical Shapes, Algebraic Equations, Factorization, Numbering Systems, Binary Coded Decimals, Simultaneous Equations, Second Degree Equations, Logarithms, Graphs, Polar Coordinates, Trigonometry, Quadrilaterals.

Prerequisite: None

Textbook: IR Part-66, Aircraft Maintenance Licence, Distance Learning Modules, Module 1-Mathematics

Other Sources:

1) Richard W. Fisher, Mastering Essential Math Skills, Math Essentials, 2007.
2) Marc Zegarelli, Basic Math and Pre-Algebra Workbook For Dummies, For Dummies Series, Second Edition.
3) Debra Anne Ross, Master Math: Basic Math and Pre-algebra, Master Math Series, 2009.

Useful Links

1. https://www.scribd.com/document/292265540/1-EASA-PART-66-GUIDE-EASA-Part-66- Mathematics-Question

2. https://www.aircraftengineer.info/mathematics-module-1/

Goals and Objectives: The objective of this course is to be familiar with the basic elements of arithmetic and their properties, to teach the fundamentals of basic algebraic equations and to give a general description of geometry, trigonometry and graphs, also it is aimed to develop the problem solving and analytic thinking skills of the student and to increase their ability to apply problems to real life.

Learning Outcomes: The students who succeeded in this course;
1. Understand the theoretical fundamentals of arithmetics,
2. Solve the problems related to arithmetics in conjunction with physical laws,
3. Recall basic algebraic notation, conventions and definitions,
4. Solve second degree algebraic equations,
5. Have an acquaintance with geometrical shapes,
6. Read and understand sketches of some curves and linear equations,
7. Learn and understand trigonometrical terms and measure,
8. Apply the knowledge of trigonometry to solve problems in practical manner.

Attendance Policy: SHY-147 conditions are required for attendance. For more detailed

information about attendance, please contact your department chair.

Make-up: Make-up exams will be given only if the proper documentation from your department chair for the absence is provided**.**

Make-Up Exam date: will be announced later.

IMPORTANT: All students should provide an ID card to serve as identification. Any student without an ID card **CANNOT** take the exam.

Grading Policy: There will be one midterm, and one final examination.

Dates of examinations will be announced later.

The weights of the exams are as follows:

Midterm	40%
Final	60%
TOTAL	**100**

COURSE CHART 2025-2026 FALL
MATH 103

Week	Dates	Topics
1	**Sept. 22-26, 2025**	Numbers, Arithmetic Operations, The Decimal System, Factors
2	**Sept. 29-Oct. 3, 2025**	Fractions, Arithmetic Operations with Fractions, Approximations
3	**Oct. 6-10, 2025**	Standard Form, Percentages, Ratio&Proportion
4	**Oct. 13-17, 2025**	Convert Basic Units between Imperial&SI Units, Perimeters, Area, Volume
5	**Oct. 20-24, 2025**	Algebraic Expressions, Equations&Identities, Arithmetical Operations with Algebraic Operation
6	**Oct. 27-Oct. 31, 2025** **(October 29th- Wednesday-holiday)**	Factorization, Equations&Linear Equations, Powers&Indices
7	**Nov. 3-7, 2025**	Numbering Systems, Arithmetical Operations with Binary Numbers
8	**Nov. 10-14, 2025**	Arithmetic Operations with Octal&Hexadecimal, Binary Coded Decimal
9	**Nov. 17-21, 2025**	Simultaneous Equation, Solving Second Degree Equations via Factorization
10	**Nov. 24-28, 2025**	Logarithms, Construction Methods
11	**Dec. 1-5, 2025**	Graphs, Curved Graphs
12	**Dec. 8-12, 2025**	Polar Coordinates, Trigonometry
13	**Dec. 15-19, 2025**	Types of Triangle, Radians&Radian Measure, Quadrilaterals
14	**Dec. 22-29, 2025**	REVIEW