**INTRODUCTION TO COMPUTER SCIENCE**

**ENF 1170**

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| **Academic Year**  | 2018-2019 |
| **Semester** | Spring |
| **Class Hours** | Mondays 10:00-14:00 |
| **Class Room** | 109 |
| **Instructor**  | Dr. Tunç Durmaz |
| **E-mail** | tdurmaz@yildiz.edu.tr |

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| **Course Material** |
| **Textbooks** | Lecture Notes |

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| **Course Plan** |
| **WEEK 1 : February 11** | Introduction to the Course |
| **WEEK 2 : February 18** | Introduction to Linear Algebra, Matrices, Special Matrices |
| **WEEK 3 : February 25**  | System of Equations, Determinant, Inverse, and Trace |
| **WEEK 4 : March 4** | Gaussian Elimination, LU decomposition, Cramer’s Rule |
| **WEEK 5 : March 11** | Economic Applications |
| **WEEK 6 : March 18** | **1st Midterm (TENTATIVE)** |
| **WEEK 7 : March 25** | Introduction to Flowcharts and Algorithms |
| **WEEK 8 : April 1** | General Problems and Flowcharts |
| **WEEK 9 : April 8** | Loops, Sequences, and Flowcharts |
| **WEEK 10: April 15** | Matrices and Flowcharts, Finding Minimum and Sorting |
| **WEEK 11: April 22** | **2nd Midterm (TENTATIVE)** |
| **WEEK 12: April 29**  | Introduction to Matlab |
| **WEEK 13: May 6** | Matlab Applications |
| **WEEK 14: May 13** | Economic Applications by Matlab |

**Grading Policy**

The end of semester average grade of each student $(x\_{i})$ will be calculated from midterms and final using the weights below:

|  |  |  |
| --- | --- | --- |
| **Grading** | **Number** | **Weight (%)** |
| **Midterm Exam** | 2 | 30 |
| **Final** | 1 | 40 |

**The minimum passing grade is determined as 40 by the University Senate. If your end-of-the-semester grade is below 40, you will fail the course, and your grade will be determined according to your end-of-the-year grade based on the table given below:**

|  |  |
| --- | --- |
| **End of the Year Avg Grade** | **Grade** |
| 30-39 | DC |
| 20-29 | FD |
| 0-19 | FF |

If your end-of-the-semester average grade is above 40, your letter grade will be determined based on a standard normal distribution catalog system.

Firstly, the mean (*µ*) and the standard deviation ($σ$) will be calculated from the students’ grades for all the three groups of *INTRODUCTION TO COMPUTER SCIENCE* Course.

Secondly, the *z*-score of every student $\left(z\_{i}\right) $will be calculated using the below formula.

$$z\_{i}= \frac{x\_{i}-μ}{σ}$$

Finally, the table below will determine the letter grade of the student.

|  |  |
| --- | --- |
| **z-score Interval** | **Grade** |
| >2.00 | AA |
| 1.60-1.99 | BA |
| 1.20-1.59 | BB |
| 0.80-1.19 | CB |
| 0.40-0.79 | CC |
| 0.00-0.39 | DC |