

# BLM3021 , Algorithm Analysis , Group 2,3

Associate Professor M. Amaç GÜVENSAN

## Textbook:

Anany Levitin, "Introduction to Design & Analysis of Algorithms (3<sup>rd</sup> Edition)", Pearson, 2011

## Supplementary Textbooks:

Steven Skiena, "The Algorithm Design Manual", 2010

Robert Sedgwick, Philippe Flajolet, "An Introduction to the Analysis of Algorithms (2nd Edition)", 2013

## Tentative Schedule:

1. Introduction (Aims and Scope, Syllabus, Evaluation, Student Questions) (06.10.2021)
2. Fundamentals of the Analysis of Algorithms Efficiency (13.10.2021)
3. Asymptotic Analysis (20.10.2021)
4. Analysis of Non-Recursive and Recursive Algorithms(27.10.2021)
5. Analysis of Divide and Conquer Algorithms (03.11.2021)
6. Hashing Algorithms - I (10.11.2021)
7. Hashing Algorithms - II (17.11.2021)
8. Dynamic Programming - I (24.11.2021)
9. Midterm - I (01.12.2020)
10. Dynamic Programming - II (08.12.2021)
11. Analysis of Graph Algorithms (15.12.2021)
12. Midterm - II (22.12.2021)
13. Backtracking and Branch-and-Bound Algorithms (29.12.2021)
14. Space and Time Trade-Offs (Sorting Algorithms) (05.01.2022)

GRADING (could be revised)				
	Midterms	Assignment	Semester Project	Final
Number	2	3	1	1
Impact	30%	20%	10%	40%