

EEE 285 APPLIED DIFFERENTIAL EQUATIONS

FALL 2022

- Main text:** Edwards and Penney, Differential Equations and Boundary Value Problems Computing and Modeling, Pearson.
- Lectures:** Wednesday 8:30 for Room D1, 9:25 for Room D2 (First Ed),
Wednesday 17:00 (Second Ed)
- Rooms:** First Ed:
Old curriculum: D1, New curriculum A-İ: D1, K-Z: D2 (by surname initials)
Second Ed:
Old curriculum: D1, New curriculum (Second Ed): A-E Room D1, F-Z: D2 (by surname initials)
Lectures at room D1: by Dr. Tolgay Kara (kara@gantep.edu.tr)
Lectures at room D2: by Dr. Musa Bute (mbute@gantep.edu.tr)
- Grading:** 2 Midterm exams (30% each), Final exam (40%)

Course content and tentative schedule	
Week 1	Introduction to the Course,
Weeks 2	Basic Definitions, Mathematical Models,
Weeks 3	First Order Differential Equations
Week 4	Numerical Methods
Week 5-6	Linear Equations of Higher Order
Week 7	Midterm Exam 1
Week 8	Linear Equations of Higher Order (Cont'd)
Week 9	Systems of Differential Equations
Week 10	Boundary Value Problems, Eigenvalue Problems
Week 11	Laplace Transform Methods
Week 12	Midterm Exam 2
Week 13	Laplace Transform Methods (Cont'd)
Week 14	Series Solution Methods, Concluding Remarks
Week 15/16	Final Exam