## ADVANCED ENGINEERING MATHEMATICS Course Title: ADVANCED ENGINEERING MATHEMATICS 1 Course Code: MAK5001 2 Type of Course: Compulsory 3 Level of Course: 4 Second Cycle Year of Study: 5 1 Semester: 1 6 ECTS Credits Allocated: 6.00 7 Theoretical (hour/week): 3.00 8 9 Practice (hour/week): 0.00 10 Laboratory (hour/week): 0 Prerequisites: None 11 Turkish 12 Language: Mode of Delivery: Face to face 13 Course Coordinator: Prof. Dr. MURAT REİS 14 15 **Course Lecturers:** Contact information of the Course reis@uludag.edu.tr 16 Coordinator: 17 Website: https://www.youtube.com/watch? v=xzwvv8HxFrY&list=PLsxmiXTQvQn\_RwSszpm2nARgRDVs01sq U To learn advanced mathematical methods used in solving 18 Objective of the Course: engineering problems. 19 Contribution of the Course to This course contributes to the student's ability to analyze and solve Professional Development: engineering problems. 20 Learning Outcomes: 1 Students taking this course learn advanced math topics and methods. 2 They can model engineering problems and solve them using mathematical methods. 3 4 5 6 7 8 9 10 Course Content: 21 **Course Content:** Theoretical Week Practice Review of ordinary differential equations. 1 Ordinary differential equations engineering 2 applications 3 Series solutions of differential equations. Frobenius method.

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