

Math 6390: Minimal Surfaces

Spring 2021

Math 6390: FO 2.208 / TTh 2:30 - 3:45pm

- Instructor:** Baris Coskunuzer / FA 2.140 / coskunuz@utdallas.edu
- Office Hours:** TTh 11:30am-1pm and by appointment.
- Class home page:** http://www.utdallas.edu/~coskunuz/courses/math6390_S21
- Recommended Texts:** [Minimal Surfaces](#) (Danny Calegari)
[Lectures on Minimal Surface Theory](#) (Brian White)
[A course in Minimal Surfaces](#) (T. Colding – W. Minicozzi)
[Geometric Measure Theory](#) (Frank Morgan)
- Prerequisites:** Math 3380 (Differential Geometry)
- Course Description:** This course is aimed to give a thorough introduction to minimal surfaces, which are essential objects in geometric analysis, geometric topology, and theoretical physics.
- Content:** Minimal Surface Equation, First and Second Variation Formula, Plateau Problem, Introduction to Geometric Measure Theory, Min-Max Method, Minimal Surfaces in 3-manifolds.
- Grading:** 1 midterm exam (30%) + 1 project/presentation (40%) + Final exam (30%)
- UT Dallas Syllabus Policies and Procedures:** The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.