

MTH 573 Fall 2019

Pseudodifferential Operators

Instructor: Prof. Allan Greenleaf, Hylan 1020,
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Office hours: TR (2:00-3:00 p.m.) or by appointment.

Contents: This will be an introduction to microlocal analysis, starting with pseudodifferential operators and their applications to elliptic partial equations (PDE). It will then continue with an overview of Fourier integral operators and their applications to hyperbolic PDE and Radon transforms.

Prerequisites: MTH 471 and 472, or equivalents. Familiarity with the Fourier transform and some PDE will be helpful. Some background material will be presented in class and some will be assigned as reading. Please ask the instructor if you have any questions about your preparation for the course.

Time and Place: The course will be taught on a compressed and slightly irregular schedule, with class meeting times \subseteq **TR 9:40 a.m - 12:20 p.m.** in **Hylan 1106B**. The first class will be on Tuesday, Sept. 30, and the last on Thursday, Dec. 5. The four meeting times are denoted in the table by **A:** T 9:40 - 10:55; **B:** T 11:05 - 12:20 **C:** R 9:40 - 10:55 **D:** R 11:05 - 12:20:

Week	Class meetings	Comments
9/30	ABC	First class: T, 9/30
10/7	ABCD	
10/14		no classes
10/21	C	meet once
10/28	ABCD	
11/4	ABC	
11/11	ABC	
11/18	ABCD	
11/25	AB	Thanksgiving
12/2	ABCD	Last class: R, 12/5