

METR 5233: Cloud and Precipitation Physics

Syllabus

CLASSROOM: National Weather Center, Rm. 5720

CLASS TIME: Mon.-Wed.-Fri. 12:00-12:50

OFFICE HOURS: Mon. & Fri. 2:00-4:00, or by appointment

INSTRUCTOR:

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TEXT BOOK:

Rogers and Yau: *A Short Course in Cloud Physics*, Third Edition

REFERENCE BOOKS:

Pruppacher and Klett, *Microphysics of Clouds and Precipitation*
Straka, *Cloud and Precipitation Microphysics: Principles and Parameterizations*

COURSE DESCRIPTION

This course is intended to introduce students to the physical states and processes of clouds and precipitation at greater depth than the usual undergraduate course on the subjects. Polarimetric radar data and in-situ observations will be used in the class to illustrate precipitation development and evolution. Potential applications of cloud microphysics in model parameterization will be discussed.

GRADES

Homework problems: 30%

Quiz questions: 20%

Midterm examination: 20%

Final examination: 30%