ASME 434 Atmospheric Dynamics II
Department of Physics
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Chapter 1 Introduction

In ASME 434, Atmospheric Dynamics II, we will cover the following contents:

Class Schedule [Click here for a complete calendar]

Presentation Schedule

Date	Pres. #	Presentation Title	Remarks
1/13	1	Introduction	Overview
1/15	2	Circulation Theorems	Sec. 4.1 (Holton)
1/20	3	Circulation Theorems	4.1
1/22	4	Circulation Theorems	4.1
1/27	5	Vorticity	4.2
1/29	6	The Vorticity Equation	4.3
2/3	7	The Vorticity Equation	4.4
2/5	8	Potential Vorticity	4.4
2/10	9	Potential Vorticity	4.4
2/12	10	Potential Vorticity in Homogeneous Fluid	4.6
2/17	11	Application of PV to the Atmosphere	Lecture Note
2/19	12	General Circulation	6.1 & Ch.10
2/24	13	Frontogenesis and Cyclogenesis Theories	Lecture Note
2/26		Midterm	
3/2-3/6		Spring Break	
3/10	14	Isolated convective storms (single-cell, multicell, & supercell)	8.1-8.3 (Lin07)
3/12	15	Isolated convective storms (single-cell, multicell, & supercell)	As above
3/17	16	Supercell storms & tornadogenesis	8.4-8.5 (Lin07)
3/19	17	Supercell storms & tornadogenesis	As above
3/24	18	Mesoscale convective systems (squall lines, rainbands)	9.2 (Lin07)
3/26	19	Mesoscale convective systems (squall lines, rainbands)	9.1-9.2 (Lin07)
3/31	20	Mesoscale convective systems (MCS)	9.3 (Lin07)
4/2	21	Mesoscale convective systems (MCS)	9.3 (Lin07)
4/7	22	Tropical Cyclones	9.3 (Lin07)
4/9	23	Tropical Cyclones	9.3 (Lin07)
4/14	24	Orographic influence on climatological distribution of precipitation and preexisting disturbances	11.1 (Lin07)
4/16	25	Common ingredients of orographic precipitation	11.2 (Lin07)
4/21	26	Orographic precipitation mechanisms & Control parameters	11.3-4 (Lin07)
4/23	27	Introduction to Wave Dynamics	Lecture Note
4/28	28	Introduction to Wave Dynamics	Lecture Note
4/30	29	Introduction to PBL	Lecture Note
5/4-5/8		Final Exam	

** These descriptions and timelines are subject to change at the discretion of the instructor.*