

Fall 2025 ATM515 Tentative Class Schedule (Mon & Wed 3:00-4:20 PM, ETEC 482)

week	day	topic	reading	notes
			S&P textbook	
1	8/25	General info (self-introduction, syllabus, schedule, etc.); Advanced Particle Microphysics (APM) Model		
	8/27	Overview of aerosols and research issues		
2	9/1	<i>No class, Labor day</i>		
	9/3	Characterization of aerosols	ch 8, ch 15	
3	9/8	Characterization of aerosols	ch 8, ch 15	
	9/10	Aerosol optical properties & Aerosol-cloud interactions	ch 24.8	
4	9/15	Dynamics of single aerosol particles	ch 9	1 st hw due ¹
	9/17	Dynamics of single aerosol particles	ch 9	
5	9/22	Thermodynamic of aerosols	ch 10	
	9/24	Thermodynamic of aerosols	ch 10	2 nd hw due
6	9/29	Nucleation	ch 11	
	10/1	Nucleation	ch 11, papers	
7	10/6	Condensation/Evaporation	ch 12	
	10/8	APM model Part I: Description & computer set-up (bring laptop, registered students only, make sure you have access to head.its.albany.edu)		Mao will be at class
8	10/13	<i>No class, Fall break</i>		
	10/15	<i>No class (AAAR Annual Conference) self-practice to get familiar with APM model</i>		
9	10/20	APM model Part II: In class hand-on practice (bring laptop) (Guest Lecturer: Dr. Jingbo Mao)		Yu on travel
	10/22	APM model III: In class hand-on practice (bring laptop) (Guest Lecturer: Dr. Jingbo Mao)		Yu on travel
10	10/27	APM model IV: In class hand-on practice (bring laptop) (Guest Lecturer: Dr. Jingbo Mao)		3 rd hw due Yu will be at class
	10/29	Homework and mid-term review		
11	11/3	Mid-term exam		Mid-term exam
	11/5	Term paper discussion, Aerosol measurements and online datasets		
12	11/10	<i>No class, Lecture combined with that of 11/12</i>		
	11/12	(3 – 5:40 pm) Dynamics of aerosol populations I & II	ch 13	Tentative term paper topic due ²
13	11/17	Dry/Wet deposition, General Dynamic Equation	ch 19, 20, 13	Final term paper topic due ³
	11/19	Carbonaceous aerosols	ch 14	
14	11/24	Aerosol modeling and comparisons with observations		4 th hw due
	11/26	<i>No class, thanksgiving</i>		
15	12/1	<i>No class, Lecture combined with that of 12/3</i>		
	12/3	(3 – 5:40 pm) Term project presentation & discussion		
16	12/8	<i>No class, working on term paper</i>		Last day of class
	12/10	Term paper due by 5 pm		Term paper due

Monday, September 1, 2025: Classes Suspended – Lab Day

Monday, October 13, 2025 to Tuesday October 14, 2025: Fall 2025 Classes Suspended Fall Break

Wednesday, November 26, 2025 to Sunday, November 30, 2025: Classes Suspended – Thanksgiving

Wednesday, December 10, to Tuesday, December 16, 2025: Final Exam

¹ All homework due by the beginning of the class of the due date.

² Share your plan for the term project with the class.

³ Submit a one-page outline of your term project.