



NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

Fall 2026 Class Schedule

College of Science & Technology

Department of Physics

NOTE: Students are responsible for reading, understanding, and following the syllabus.

Undergraduate Course Information

Course Name: [Atmospheric Dynamics I](#)

Course Number/Section: [ASME 433](#)

Credit Hours: [3](#)

Days and Times: [14:00 – 15:15 TR](#)

Class Location: [Gibbs 302](#)

Instructor Contact Information

Instructor: [Dr. Yuh-Lang Lin](#)

Office Location: [302H Gibbs](#)

Email Address: ylin@ncat.edu

Office Phone: [336-285-2127](#)

Class Schedule

Presentation Schedule

Date	Subject	Reading, Activity, Homework, Exam
8/20	1. Introduction	Sec. 1.1
8/25	2. Real Forces (Equation of Motion in Inertial Frame of Reference)	Sec. 1.2
8/27	3. Apparent Forces (Equation of Motion in Rotating Frame of Reference)	Sec. 1.3
9/1	4. Alternate Vertical Coordinates	Sec. 1.4
9/3	5. Scale Analysis and Approximations of Equation of Motion	Sec. 2.2-2.4
9/8	(5. continued)	Sec. 2.2-2.4 HW 1
9/10	6. Derivation, Scale Analysis, and Approximations of Continuity Equation	Sec. 2.5
9/15	7. Derivation and Scale Analysis of Thermodynamic Equation	Test 1 (1-5)
9/17	8. Static Instability	Sec. 3.2 HW 2
9/22	9. Conditional Instability	Sec. 3.3
9/24	10. Potential Instability	Sec. 3.3, HW 3
9/29	11. Basic Equations in Isobaric Coordinates	Sec. 4.1
10/1	(11. continued)	Sec. 4.1

Date	Subject	Reading, Activity, Homework, Exam
10/6	12. Balanced Flow	Sec. 4.2
10/8	Midterm (Lec. 1 – 12)	Midterm
10/12-13	Fall Break	M, T
10/15	(12. continued)	Sec. 4.2, HW 4
10/20	13. Trajectories, Streamlines, and Streamfunction	Sec. 4.3
10/22	(13. continued)	Sec. 4.3
10/27	14. Thermal Wind	Sec. 4.4
10/29	(14. continued)	Sec. 4.4, HW 5
11/3	15. Diagnostic of Vertical Motion	Sec. 4.5
11/5	(15. continued)	Sec. 4.5
11/10	Wellness Day	
11/12	(15. continued)	Sec. 4.5 (Test 2)
11/17	16. Surface Pressure Tendency	Sec. 4.6, HW 6
11/19	17. Circulation Theorems	Sec. 5.1
11/24	(17. continued)	Sec. 5.1
11/25-27	Thanksgiving Holiday (W-F)	
12/1	18. Vorticity	Sec. 5.2, HW 7
12/3	19. Vorticity Equation	Sec. 5.3
12/8-10	Gibbs 302	Final Exam

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