

2024 ENSC 201 Schedule

See Moodle for detailed lecture outlines & readings. Schedules are subject to changes; if made you will be notified in advance.

Week / Date (Mon of the week)	Lecture & Weather Project Topics <i>Weekly Lecture reading quizzes and activities worth 12%.</i>	Laboratory & Weather Project Topics
1 / Jan 1	Course introduction. The atmosphere. Energy. Learn how to classify & recognize clouds. <i>Read Chapter 5 (pages 135 – 150). Review cloud chart (end of the text)</i>	No Labs this week
2 / Jan 8	Radiation terms & measurement. Radiation Laws. Shortwave & Longwave radiation.	Lab 1: Quantitative Analysis Skills & Radiation (2%) Lab 1: 1 st turn-in WxProj: Using Max/Min Thermometers; Sky Condition & Cloud Outside briefly – dress appropriately
3 / Jan 15	Net radiation. Energy balance. Global climate. WxProj: Introduction to the Weather Observation & Analysis Project	Lab 2: Radiation Measurement (2%) Lab 2: 1 st turn-in Lab 1: 2 nd turn-in WxProj: Observing /Measuring Wind; Observing Cloud Outside most of the lab – dress appropriately
4 / Jan 22	Water balance. Atmospheric moisture – concepts & measurements.	Lab 3: Energy & Water Budgets (2%) Lab 3: 1 st turn-in Lab 2: 2 nd turn-in Lab 1: returned WxProj: Measuring Precipitation; Setting WxProj Observation Schedule
5 / Jan 29	Atmospheric pressure. Hydrostatic law & its implications. Air masses, fronts. Thurs Feb 1: Course Midterm (13%)	Lab 4: Atmospheric Humidity (2%) Lab 4: 1 st turn-in Lab 3: 2 nd turn-in Lab 2: returned WxProj: Measuring Humidity; Confirm Wx Project Roof-top Observation Schedule Outside....
6 / Feb 5	Middle-latitude Cyclones. Weather maps.	Lab 5: Atmospheric Pressure (2%) Lab 5: 1 st turn-in Lab 4: 2 nd turn-in Lab 3: returned Wx Proj: Barometer Measurements, Calculations & Data Collection Practice Run – Outside...
7/ Feb 12	Atmospheric stability & cloud formation. Air pollution. Wx Proj: Data Collection Mon to Thu: (6%). Remember your observation time, partner meeting place, key returns. Complete: Roof-top Observations (2%); Weather Diary (2%); Electronic Synoptic Data Collection (1%); Teamwork Evaluation (1%) Due by 10 am Friday Feb 16 in your dropbox: Personal weather diary, completed teamwork evaluation, & collected electronic data on a memory key. All are submitted in a properly labelled, sealed ziplock bag.	Lab 6: Weather Maps & Analysis (2%) Lab 6: 1 st turn-in Lab 5: 2 nd turn-in Lab 4: returned WxProj: Interpreting Weather Maps;
Feb 19	Family Day (Mon) & Mid-Semester Break – no classes Feb 19 – Feb 23	
8 / Feb 26	Condensation, cloud & precipitation formation. Wx Proj: How to write a scientific report. <i>Collected Wx Proj data returned in Labs or here</i>	WxProj: Data Quality Control, produce Appendix 2, (1%) Bring: your laptop or use lab computers. Appendix 2 submitted Lab 6: 2 nd turn-in Lab 5, Collected WxProj data: returned
9 / Mar 4	Forces in the atmosphere. Atmospheric dynamics & wind. Jet streams, upper-level patterns.	WxProj: Time Series Graphing, produce your report graphs (1%) Sign-up for Report outline meeting times Lab 6: returned Appendix 2 returned
10 / Mar 11	Atmosphere / Greenhouse effect. Global climate & climate change.	WxProj: Report Outline Interview Meetings (2%) Bring prepared WxProj outline & resources for discussion
11 / Mar 18	Stratospheric ozone. Tropical cyclones.	No labs – work on Wx Project
12 / Mar 25	Severe summer weather.	No labs – work on Wx Project
13 / Apr 1	Severe winter weather. Exam prep & course review. WxProj Report Due: Tue Apr 2 at 4 pm in your drop box & electronically on Moodle (20%). Late reports lose 20% per day (including weekends & holidays) staring after the due time.	No labs
Exam Period April 10 - 20, 2024. ENSC 201 In-person Final Exam (33%), date TBD.		