

# 2019 ENSC 201 Schedule

NOTE: Timetable and topics can change but with advance notice.

Week / Date (Mon of the week)	Lecture & Weather Project Topics <b>Weekly Lecture activities worth 10%.</b>	Laboratory & Weather Project Topics
1 / Wed Jan 3	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 7	Radiation terms & measurement. Radiation Laws. Shortwave & Longwave radiation. <b>Wx Proj Writing Preparation: Analysing a Case Study Report (2%) Due in lecture Fri. Jan 25.</b>	<b>Lab 0:</b> Quantitative Analysis Skills (2%) Lab 0: 1 <sup>st</sup> turn-in <b>Wx Proj: Using Max/Min Thermometers; Sky Condition &amp; Cloud -- Outside – dress appropriately</b>
3 / Jan 14	Net radiation. Energy balance. Global climate.	<b>Lab 2:</b> Radiation Measurement (2%) Lab 2: 1 <sup>st</sup> turn-in; Lab 0: 2 <sup>nd</sup> turn-in <b>Wx Proj: Observing /Measuring Wind; Observing Cloud -- Outside most of the lab – dress appropriately</b>
4 / Jan 21	Water balance. Atmospheric moisture – concepts & measurements. <b>Wx Proj: Introduction to the Weather Observation &amp; Analysis Project</b>	<b>Lab 3:</b> Energy & Water Budgets (2%) Lab 3: 1 <sup>st</sup> turn-in; Lab 2: 2 <sup>nd</sup> turn-in; Lab 0: returned <b>Wx Proj: Measuring Precipitation; Setting Project Observation Schedule</b>
5 / Jan 28	Atmospheric pressure. Hydrostatic law & its implications. Air masses, fronts.	<b>Lab 4:</b> Atmospheric Humidity (2%) – <b>Outside</b> Lab 4: 1 <sup>st</sup> turn-in; Lab 3: 2 <sup>nd</sup> turn-in; Lab 2: returned <b>Wx Proj: Measuring Humidity; Check Project Observation Schedule</b>
6 / Feb 4	<b>Midterm (lecture &amp; lab) worth 10% written Wed Feb 6.</b> Middle-latitude Cyclones. Weather maps.	<b>Lab 5:</b> Atmospheric Pressure (2%) Lab 5: 1 <sup>st</sup> turn-in; Lab 4: 2 <sup>nd</sup> turn-in; Lab 3: returned <b>Wx Proj: Barometer Measurements, Calculations &amp; Data Collection Practice Run – Outside</b>
7 / Feb 11	Atmospheric stability & cloud formation. Air pollution.  <b>Wx Proj: Data Collection Mon to Thurs: (6%). Remember your observation time, partner meeting place, &amp; key returns. Roof-top observations; Weather Diary Observations; Collect Electronic Synoptic Data; Evaluate Teamwork. Due by 10 am Friday Feb 15 in your dropbox, submitted in a sealed ziplock bag, labeled with your name, your: personal weather diary, completed teamwork evaluation, &amp; collected electronic data on a memory key.</b>	<b>Lab 6:</b> Weather Maps & Analysis (2%) Lab 6: 1 <sup>st</sup> turn-in; Lab 5: 2 <sup>nd</sup> turn-in; Lab 4: returned <b>Wx Proj: Interpreting Weather Maps</b>
Feb 18	<b>Family Day (Mon) &amp; Reading week – no classes Feb 18 – Feb 22</b>	
8 / Feb 25	Condensation, cloud & precipitation formation. <b>Wx Proj: How to write a scientific report. Collected Wx Proj data returned</b>	<b>Wx Proj: Data Quality Control: Produce Appendix 2, (1%) Bring: your screen's data. Set-up Report outline meeting times</b> Lab 6: 2 <sup>nd</sup> turn-in; Lab 5: returned
9 / Mar 4	Forces in the atmosphere. Atmospheric dynamics and wind. Jet streams, upper-level patterns.	<b>Wx Proj: Time Series Graphing: Produce Graphed Data (1%)</b> Lab 6: returned; Appendix 2 returned
10 / Mar 11	Atmosphere / Greenhouse effect. Global climate & climate change.	<b>Wx Proj: Report outline meeting (2%)</b> Meet with instructors for 15 mins during lab time.
11 / Mar 18	Stratospheric ozone.	<b>No labs – work on Wx Project</b>
12 / Mar 25	Tropical cyclones. Severe summer weather.	<b>No labs – work on Wx Project</b>
<b>13 / Apr 1</b>	Severe winter weather. Exam prep & course review. <b>Wx Proj Report Due: Monday April 1 at noon in your drop box &amp; electronically (worth 20%). Late reports lose 20% per day (including weekends) starting after the due time.</b>	<b>Exam Preparation: Lab Review (2%) – Attendance &amp; Assignment</b>
<b>Final Exam (lecture &amp; lab content); worth 34%. Date TBD by Final exam schedule. Exams start Tues. April 9, 2019.</b>		