

## Private Pilot Ground School

### Course Schedule and Required Reading

Tuesdays and Thursdays, 6:30 – 9:30 pm

Classroom, Cooking Lake Aviation

*May 6<sup>th</sup>, 2021 to July 6<sup>th</sup>, 2021*

Class	Date	Topics and required reading
1	May 6 <sup>th</sup> , 2021	<p><b><i>Air Law 1 – Canadian Aviation regulations</i></b></p> <ul style="list-style-type: none"> <li>• Introductions</li> <li>• PPL requirements</li> <li>• Aerodromes</li> <li>• Canadian Air Regulations (CAR's)               <ul style="list-style-type: none"> <li>○ Aircraft documents</li> </ul> </li> </ul> <p><i>FTGU: Pages 89-98, 107</i>  <i>Sharper Edge: Pages 1-6, 30-31, 36-37</i></p>
2	May 11 <sup>th</sup> , 2021	<p><b><i>Navigation 1</i></b></p> <ul style="list-style-type: none"> <li>• Latitude and longitude</li> <li>• The earths magnetism</li> <li>• Units of speed and distance</li> </ul> <p>Aeronautical charts</p> <p><i>FTGU: Pages 177-192</i>  <i>Sharper Edge: Pages 123-125</i></p>
3	May 13 <sup>th</sup> , 2021	<p><b><i>Air law 2 – Canadian Aviation regulations</i></b></p> <ul style="list-style-type: none"> <li>• <i>CAR's continued</i></li> <li>• <i>The Canadian domestic airspace</i></li> </ul> <p><i>FTGU: Pages 98-105, 108-110</i>  <i>Sharper Edge: Pages 8-28</i></p>

4	May 18 <sup>th</sup> , 2021	<b>Navigation 2</b> <ul style="list-style-type: none"> <li>Navigation problems and flight planning FTGU: Pages 192-202 Sharper Edge: Pages 125-128</li> </ul>
5	May 20 <sup>th</sup> , 2021	<b>Air Law 3 – Canadian Aviation regulations</b> <ul style="list-style-type: none"> <li>Air traffic rules and procedures</li> <li>NOTAM's</li> </ul> FTGU: Pages 110-120 FTGU: Questions 1-7 (page 333), questions 105-140 (page 341-343), Questions 188-189 (page 347) Sharper Edge: Pages 7 and 29 Sharper Edge: Questions 1-4, 6-20, 22-100 (page 39-57)
6	May 25 <sup>th</sup> 2021	<b>Navigation 3</b> <ul style="list-style-type: none"> <li>Flight planning continued</li> <li>Radio and Electronic theory</li> </ul> FTGU: Pages 209-236, 241-245 FTGU: Questions 87-104 (page 339-341), question 141-165 (page 343-345), Questions 174-176 (page 436) Sharper Edge: Pages 132-333 Sharper Edge: Questions 1-40, 48-52, 55-87 (page 145-167)
7	May 27 <sup>th</sup> , 2021	<b>Air Law 4 – Canadian Air regulations</b> <ul style="list-style-type: none"> <li>Review and Air law Exam</li> </ul>
8	June 1 <sup>st</sup> , 2021	<b>Navigation 4</b> <ul style="list-style-type: none"> <li>Radio and Electronic theory continued</li> <li>Review and Navigation exam</li> </ul>
9	June 3 <sup>rd</sup> , 2021	<b>General knowledge 1 – Airframes, engines, and systems</b> <ul style="list-style-type: none"> <li>Airframes</li> <li>Piston Engines</li> <li>Fuel systems</li> <li>Ignition systems</li> <li>Oil systems</li> <li>The Carburetor and fuel injection</li> <li>Electrical systems</li> <li>Superchargers vs turbochargers</li> </ul> FTGU: Pages 3-11, 47-81

		<p><i>FTGU: Questions 13, 36-55 (page 335-337)</i>  <i>Sharper Edge: Page 205-212</i>  <i>Sharper Edge Questions: 2-5, 15-16, 43, 46, 51, 62, 73, 76, 87, 89, 92, 98 (page 233-249)</i></p>
10	June 8 <sup>th</sup> , 2021	<p><b>Meteorology 1</b></p> <ul style="list-style-type: none"> <li>• The earths atmosphere</li> <li>• Clouds</li> <li>• Atmospheric stability</li> <li>• Dry and wet adiabatic lapse rates</li> <li>• Types of Lifting agents</li> <li>• Calculating cloud base and freezing level</li> <li>• Temperature and how the atmosphere is heated</li> <li>• Turbulence</li> <li>• Pressure systems</li> </ul> <p><i>FTGU: page 123-130, 136-140, 158-159</i>  <i>Sharper edge: 59-69, 84-87</i></p>
11	June 10 <sup>th</sup> , 2021	<p><b>General Knowledge 2 – Aerodynamics and Theory of flight</b></p> <ul style="list-style-type: none"> <li>• Design Of The Wing</li> <li>• Principles Of Flight</li> <li>• Airfoils</li> <li>• Forces Acting On An Airfoil</li> <li>• Lift, Drag, Wingtip Vortices &amp; Ground Effect</li> <li>• Stability</li> <li>• Load Factor</li> <li>• Maneuvering speed</li> <li>• Rate and radius of turn</li> <li>• Propellers &amp; Forces</li> <li>• Flight Controls</li> <li>• Relationship of Speed To Angle Of Attack</li> </ul> <p><i>FTGU: Pages 12-32</i>  <i>FTGU: Questions 9-30 (page 333-335)</i></p>
12	June 15 <sup>th</sup> , 2021	<p><b>Meteorology 2</b></p> <ul style="list-style-type: none"> <li>• Wind Terminology</li> <li>• Sea Breeze vs Land Breeze</li> </ul>

		<ul style="list-style-type: none"> <li>• Mountain Waves</li> <li>• Thunderstorms &amp; Wind Shear</li> <li>• Weather Radar</li> <li>• Fog</li> <li>• Icing</li> <li>• Air Masses &amp; Fronts</li> </ul> <p><i>FTGU: Pages 130-136, 140-158</i>  <i>Sharper Edge: Pages 70-83</i></p>
13	June 17 <sup>th</sup> , 2021	<p><b>General knowledge 3 - Flight instruments and flight operations</b></p> <ul style="list-style-type: none"> <li>• Pitot Static System &amp; Associated Instruments</li> <li>• Earths Magnetism &amp; Magnetic Compass</li> <li>• Gyroscopic Instruments</li> <li>• Pitch, Power &amp; Bank Instruments</li> <li>• Winter Operations</li> <li>• Flight Near Thunderstorms</li> <li>• Low Level Windshear</li> <li>• Crosswind Charts</li> <li>• Canadian Runway Friction Index (CFRI)</li> <li>• Wake Turbulence</li> <li>• Wheelbarrowing</li> <li>• Position of flight controls while taxiing in wind</li> </ul> <p><i>FTGU: Page 33-44, 263-268, 281-283, 293-294</i>  <i>FTGU: Questions 33-34, 190-194 (page 335-348)</i>  <i>Sharper Edge: Pages 216-225</i></p>
14	June 22 <sup>nd</sup> , 2021	<p><b>Meteorology 3</b></p> <ul style="list-style-type: none"> <li>• Weather reports</li> </ul>
15	June 24 <sup>th</sup> , 2021	<p><b>General Knowledge 4 -Flight operations continued</b></p> <ul style="list-style-type: none"> <li>• Weight &amp; Balance Calculations &amp; Conversion Factors</li> <li>• Aeroplane performance</li> <li>• V speeds</li> <li>• Effects of changing winds on approach angle</li> <li>• Effect of changing winds on angle of climb and rate of climb</li> <li>• Hydroplaning</li> </ul>

		<ul style="list-style-type: none"> <li>• Take Off Blast Areas</li> <li>• Human Factors &amp; Pilot Decision Making               <ul style="list-style-type: none"> <li>○ Aviation Physiology</li> <li>○ The Pilot &amp; The Operating Environment</li> <li>○ Aviation Psychology</li> </ul> </li> </ul> <p><i>FTGU: Page 263-297, 309-328</i>  <i>Questions FTGU: 178-187, 190-203 (Page 346-348)</i>  <i>Sharper Edge: Pages 129-131, 142-143, 226-232</i>  <i>Sharper Edge: Questions 88-91 (page 167-168), 93-96 (page 169-170), 17, 19, 26-35 (page 237-239), 63-66 (page 243-244)</i></p>
16	June 29 <sup>th</sup> , 2021	<p><b>Meteorology 4</b></p> <ul style="list-style-type: none"> <li>• Review and Meteorology exam</li> </ul>
17	July 1 <sup>st</sup> , 2021	<p><b>General Knowledge 5</b></p> <ul style="list-style-type: none"> <li>• Review and General Knowledge exam</li> </ul>
18	July 6 <sup>th</sup> , 2021	<p><b>Final Exam</b></p>