

## Ground School Syllabus 2017-2018

Course information: Ground School is the first step towards any exciting aviation career. All pilots must have a thorough understanding of the theory which allows them to fly in order to be safe and professional. This course is an intensive 13-week period from September to December that targets all the basic knowledge required to take the Glider and/or Power Pilot Scholarship Exam.

Contact information: Direct any questions to: 583groundschool@gmail.com

### Texbook:

From the Ground Up by Sandy A. F. Macdonald (either edition is equivalent)  
28th ed

ISBN-10: 1560274522

ISBN-13: 978-1560274520

29th ed

ISBN 978-0-9730036-3-5

### Important dates:

Class times: Wednesdays, 1800-2000hrs

Location: Maple Ridge Library

Start date: Wednesday September 20th 2017

End date: Wednesday December 13th 2017

Exam: January 6th 2018 at 861 Silverfox Sqn, Abbotsford

Review Boards: February 17-18th 2018 Archbishop Carney Secondary School, Port Coquitlam

Deadline for Cat 3 medical: June 1st 2018

### Course outline:

1. Air law (Sept 20-27)
  - a. Chapter 4: Aerodromes and Airspace, all content in this section excluding:
    - i. Section C: The U.S. Airspace System
  - b. Chapter 5: Air Rules and Procedures, **only 2 sections are required:**
    - i. Right of way, and
    - ii. Rules of the Air
2. Meteorology (Oct 4-25)
  - a. Chapter 6: Aviation weather, all sections except:
    - i. VMC and IMC

- ii. Briefly skim Section I: Thunderstorms
  - iii. Briefly skim Section L: High level weather
- 3. Aircraft Operations (Nov 1-Nov 22)
  - a. Chapter 1: The airplane, all content in this section; the glider and power pilot exam excludes:
    - i. Logbooks,
    - ii. Inspection, and
    - iii. Section C: Aircraft classes and categories (the student should be made aware that these categories exist for air law purposes)
  - b. Chapter 2: Theory of Flight, all content in this section; the glider pilot exam excludes:
    - i. The radar altimeter
    - ii. Gyro instruments
    - iii. Angle of Attack Indicator and
    - iv. Mach indicator
  - c. Chapter 3: Aero engines is exclusively for the Power Pilot Scholarship Course; the exam excludes the following units:
    - i. Jet propulsion
- 4. Navigation (Nov 29)
  - a. Chapter 7: Air Navigation, all sections except:
    - i. Dry vertical card compass
    - ii. The astro compass
    - iii. Finding the sun's true bearing
    - iv. Plotting instruments
    - v. Preparing the chart for flight
    - vi. Ten degree drift lines
    - vii. "Two-Point" Method of flying a visual range
    - viii. Return to point of departure
    - ix. Groundspeed check
    - x. Section E: Navigation problems
- 5. Radio (Dec 6)
  - a. Chapter 8: Radio, a brief skim of this chapter is required, the expected learning outcomes are:
    - i. Memorization and application of the radio phonetic alphabet
    - ii. Emergency channels
    - iii. Section D: Radiotelephone procedure
    - iv. The meaning of Mandatory Frequency and Aerodrome traffic frequency
    - v. Difference between distress and urgency
- 6. Mock final Dec 13th