



Aviation 15 Semester 1

Instructor Contact Info and Tutorial Times

Ms. Fisico	Room 1104	isfisico@cbe.ab.ca	Monday and Thursdays 1535-1605
Mr. Pye	Room 1104	dcpye@cbe.ab.ca	Tuesday and Wednesday 0825-0855

Course Descriptions

Students in this course can expect two areas of instruction:

- Pilot Knowledge: Ground school and flight simulator training
- Aircraft Structural Repair Knowledge: The tools, understanding and skills used to fabricate aviation grade parts

Students in Aviation 15 can expect to learn the outcomes in the Nelson Mandela High School's Locally Developed Course and the fabrication outcomes in the Alberta CTS Program of Studies, with an emphasis on the tools and procedures related to aviation structures.

Aviation 15 Structures Overview

Fabrication Tools and Materials: 1 Credit

- Students use basic aviation tools, materials and processes to fabricate metal into finished products
- Universal Head Riveting:
 - 1 practice project
 - 2 graded projects

Sheet Fabrication 1: 1 Credit

- Students use basic aviation tools, materials and processes to fabricate sheet metal into advanced finished products.
- Flush Head Riveting:
 - 1 practice project
 - 3 graded projects

Fabrication Tools and Materials **and** Sheet Fabrication 1 are prerequisites for Structures 25.

Fabrication Principles: 1 Credit

- Students develop knowledge and skills in the use of basic hand tools and materials used in fabrication processes.
 - 2 steel rivet gauges
 - Drill bit stand

Aviation 15 Structures Assessment

- 1, 2 or 3 credits possible
- Each project is assessed for skills and competencies:
 - 80% Skills:
 - Demonstrate precision measuring and layout
 - Demonstrate shop safety
 - Demonstrate use of aviation specific hand tools

- Demonstrate use of aviation specific power tools
- Demonstrate aviation specific metalworking skills
- 20% Competencies:
 - Demonstrate basic competencies (clean-up, on-task behaviour, etc.)
 - Explores post-secondary and career opportunities in aviation

Aviation 15 Flight Overview

Students will learn and be assessed on a variety of ground school (theory of flight) concepts. In addition to this, students will learn, practice, and demonstrate flight skills in the flight simulators.

Aviation 15 Flight Assessment

- 3 Credits
- 60% Knowledge
 - Aviation Laws and Procedures
 - Meteorology Knowledge
 - General Aeronautical Knowledge
- 20% Skills
 - Navigation and Radio Concepts
 - Aircraft Simulator Operation
- 20% Competencies
 - Explores Careers in Aviation

Course Materials and Fees

Bring to class:

- Paper
- Something to write with
- Something to hold your paper and prevent it from getting lost

All other materials will be provided.

There is a **\$55 course fee** for Aviation 15. This covers the safety glasses, sharpie pen, and all the consumable materials you will use – metal and rivets. It is preferred that you pay the fees online through a parent/guardian's Powerschool, but they can also be paid at the school business office. <https://www.cbe.ab.ca/registration/fees-and-waivers/Pages/default.aspx>

Shop Dress Code

Students must follow the dress code when in the shop, if *any* people are working with tools.

- Safety glasses are required
- Closed toed shoes are required
- Hearing protection is strongly recommended
- Long hair must be tied up
- Dangling clothes/jewelry must be removed or tucked away

Safety

A safety briefing will be given prior to using tools and materials in the shop. Safety infractions may result in verbal reminders, documentation, and, depending on severity and frequency, may be sent to administration.

Phone Policy

Student must exercise courtesy, respect, and good judgement when using cell phones so as not to interfere with the learning educational environment.

Bathroom Policy

- Students must ask permission from a teacher before leaving the room
- Students must sign in and out of the classroom when leaving
- Only one student can leave the room at a time

Plagiarism Policy

When ideas, projects, or work are taken from other sources without giving credit, this is known as plagiarism. Plagiarism is the unacknowledged or unauthorized use of somebody else's words, ideas, and physical projects, including AI-generated material. We expect our students to act with academic integrity, and to use their own knowledge to demonstrate authentic learning. Student honesty and ethical behaviour is foundational to their schoolwork and in how they handle challenges. We support students' authentic and ethical learning through teaching when and how to cite resources. Please see our D2L page for more information about plagiarism and how to cite work that is not your own.

Work that has been identified as plagiarized will not be accepted.