Learning objectives:

The aviation club plans to give members a fundementaly basic understanding of the mechanics of flight and experiance in practical application to build fairly complex air crafts.

*As we are going into 11th grade, more students may want to join the club, therefore they will recieve printed and/or virtual documents of the content covered in the previous year to make sure that they are caught up. Any doubts can be clarified with Madhav.

*Theory - In the following classes, the content will be more thuroughly planned out and at the end of the class, **members will recive a virtual/hard copy document of the content of each cla**ss

*All members will also recive a hard copy of all the information given in 'Basic Concepts' to assure that they know all the nessesary information required to complete future tasks planned. Not all content under 'Basic Concepts' have been covered and are a part of the topics to be covered in the future.

Topics covered in the following list are also explained in detail in 'Basic Concepts'

Topics to be covered in the future:

- Basic algorithms for elevators.
- Models for individual control surfaces.
- Servos and mechanics.
- Planning for suitable fuselages and motors.
- Replication of correction systems for each control surface, with a new IMU.
- Radio transmitters and receivers.
- Programming algorithms into the autopilot.

*Practicle – An RC plan will be built over a 3-4 classes after all the parts have been delivered.
Desired learning from practicle work:

- Basic understanding of matching electronics (mentioned in 'basic concepts')
- Examples and reasons for the use of certan matirials in flight
- Practical applicaton of understanding of 'control surfaces'
- Methods mounting devices in the fusilauge to minimize heat disapation and to reduce space required for parts.
- How choice of propeller affects flight and how to calculate radius required.
- Members will also develop their motor skills helping with future precise work

*Depending on their availability, guest lecturers may be invited to teach and talk about their carear This will help members learn about the kind of experiences that occor in this field of work.

*Day trips may also be organized with the school's permission to promote practicle learning.

*In the 'Organizational projects' , a workshop has been planned for members of the club to teach other classes about what they have learned and the practicle application of the concepts should bring about an interest of science and flight in the students.

*In the 'Organizational projects', a very ambitious goal is presented that is 'Competitive Building'. This will be either an intra/interschool competition. Here, all students particepating will learn about the

practicle application mentioned above.