The role of science education for our Gleneagles Secondary College students is to help them to understand more about science and its processes, recognise its place in our culture and society, and be able to use it in their daily lives.

As teachers we wish to increase students interest in and develop a sound understanding of the world around them, to question scientific claims and to make claims of their own. By developing students with a natural curiosity and inquisitive mind we can help shape our future.

To celebrate and reward the students in our college who foster these ideals we are running a Science Exhibition from August 21\textsuperscript{st} – 24\textsuperscript{th}. There are 3 categories for which prizes will be offered.

Category 1 – Scientific Research

Category 2 – Scientific Photography
Judges include PhotoAddix Photography and Megan Neil Photography (TBC)

Category 3 – Science Fiction Posters

Each category will have 3 age groups from Juniors (Year 7/8), Middles (9/10) and Seniors (VCE). Prizes will be offered for all 1\textsuperscript{st} place competitors as well as house points allocated to all entrants and prize winners.

Rules for each categories can be found on the school website at www.gleneagles.vic.edu.au
1. Scientific Research/ Science Fair

Age groups: Juniors (year 7/8) Middles (year 9/10) Seniors (VCE)

Students are to choose an area of interest in which they will design an experiment to test a hypothesis and present a report. Students’ name should not be visible on the documents submitted for display.

They will write a report which will contain

1. Introduction
   This must be relevant to the topic and explain why you chose this topic. It must define key terms and provide some background information as well as answering the question “what were you looking at?” Some information from your background reading would be useful.

2. Aim
   This must give a clear indication of what you wish to achieve your investigation.

3. Materials
   List or describe the equipment you used to carry out your experiment.

4. Method
   Presentation of the method should allow someone else to follow your experiment step by step. Method should report what was actually done, not what you should do. Remember to include a description of the safety precautions you used to conduct the experiment.

5. Observations and Results
   Present your result in easily understood format which may include tables, graphs, photos maps and descriptions. All information should be clearly labeled. Where possible results should involve measurement.

6. Discussion
   Judges pay particular attention to the quality of your discussion. Analyse what your results show. Discuss the validity and implications of your results. Do your results prove or disprove your hypothesis? What problems did you encounter? How could you improve your experimental design or data collection? What errors could you have made? Explain any unexpected results.

7. Conclusion
   The conclusion must relate to the aim.
2. Science Photo Competition

Age groups :- Juniors (year 7/8), Middles (year 9/10), Seniors (VCE), Staff

In this section you are asked to submit photographs which record some scientific event or illustrate some scientific phenomenon. You may submit between one and three photographs, which must be linked by a common theme. Be careful to prepare prints that are suitable for display. Your topic may be based on any scientific theme.

Students must submit their prints, and original images or negatives and a short written statement on the entry form.

Each print must be separately mounted on the provided entry form which are no bigger than A4 size. Professional mounting is not required. Prints are for display. Book, poster and collage format are not allowed.

Photographs must be taken by the entrant using a traditional or digital camera. Any enhancements to photographs either digital or traditional must be done by the student.

Images cannot be taken from other print or electronic sources.

All original, unaltered images must also be provided on a separate A4 sheet of paper as part of the explanation of the process undertaken, regardless of whether you altered the final images.

Scientific Content – On the entry form describe the scientific principles or ideas you are displaying in your photographs and the relevance of the particular photographs you have selected.

Please note: if your image contains an image of a person, then permission to use their image must be obtained. This permission must be submitted with your photo. Your science teacher can provide you with the appropriate form.
3. Science Fiction Poster Competition

Age groups: - Juniors (year 7/8), Middles (year 9/10), Seniors (VCE)

The theme for Posters is Science Fiction. Dream what is possible for the future and explore what science would be needed to make it happen.

Your poster should

Give a clear explanation of the scientific and technical principles involved

Explain the significance and impact that the topic has in the real world

Include at least 3 relevant diagrams

List references used. Put these in a **small box** at the bottom **right hand corner** of the poster

Maximum poster size is 80cm x 60cm. The minimum size that will be accepted is 60cm x 40cm.

All diagrams and text must be original.

Text must be in your own words. It may be hand written or produced via computer. The text needs to be concise

Written information must be legible (visible from 1 metre) and contain a major heading for the topic and sub-headings (visible from 2 metres) for ideas/concepts within the topic.

Maximum word limit is 400 words, including headings, explanations and captions; excluding bibliography

Diagrams may be either hand drawn or produced using tools on a computer. Diagrams copied from other software or downloaded are not acceptable.
ENTRY FORM – PHOTO COMPETITION

TITLE: ____________________________________________________________

SCIENTIFIC CONTENT:

NAME: ___________________________________________ H/G____
Science Fiction Poster

Title :
___________________________________________

NAME _______________________________________

H/G ________


Experimental Report

Title :
___________________________________________

NAME : _______________________________________

H/G ________

Big ideas, great discoveries, future leaders