JOHN EDMONDSON HIGH SCHOOL
Assessment Notification

Faculty: Industrial Arts **Course: iSTEM** **Year: 9**

Assessment Task: Design Folio and Practical

Assessment Weighting: 35% **Due: Term 2 Week 5 Monday Date: 29/05/2024**

Task Type: Hand in Task ☒ In Class Task ☐ Practical Task ☒

Outcomes assessed (NESA)
• **ST5-1** designs and develops creative, innovative, and enterprising solutions to a wide range of STEM-based problems • **ST5-2** demonstrates critical thinking, creativity, problem solving, entrepreneurship and engineering design skills and decision-making techniques in a range of STEM contexts • **ST5-3** applies engineering design processes to address real-world STEM-based problems • **ST5-4** works independently and collaboratively to produce practical solutions to real-world scenarios • **ST5-5** analyses a range of contexts and applies STEM principles and processes • **ST5-6** selects and safely uses a range of technologies in the development, evaluation, and presentation of solutions to STEM-based problems • **ST5-7** selects and applies project management strategies when developing and evaluating STEM-based design solutions • **ST5-8** uses a range of techniques and technologies, to communicate design solutions and technical information for a range of audiences • **ST5-9** collects, organises, and interprets data sets, using appropriate mathematical and statistical methods to inform and evaluate design decisions • **ST5-10** analyses and evaluates the impact of STEM on society and describes the scope and pathways into employment.
Task Description/Overview
Aeronautical Engineering – Skylap project
Detailed Assessment Task Description
Complete the Skylap booklet and the production of your plane

Assessment Criteria		
Grade	**Description**	**Mark Range**
Outstanding (O)	The student has an extensive knowledge and understanding of the content and can readily apply this knowledge. In addition, the student has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.	**90-100**
High (H)	The student has a thorough knowledge and understanding of the content and a high level of competence in the processes and skills. In addition, the student is able to apply this knowledge and these skills to most situations.	**80-89**
Sound (S)	The student has a sound knowledge and understanding of the content and has achieved a good level of competence in the processes and skills.	**60-79**
Basic (B)	The student has a basic knowledge and understanding of the content and has achieved a basic level of competence in the processes and skills.	**30-59**
Limited (L)	The student has an elementary knowledge and understanding in a few areas of the content and still required further work to achieve competence in the processes and skills.	**0-29**

Satisfactory completion of courses
A course has been satisfactorily completed, when the student has:

- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes

Year 9 iSTEM

Skylap Folio & Practical Production

Student Name: _____

		MARKS	Max
Complete the 10 questions throughout the folio	• Accuracy of responses • Evidence of research • Use of own words		**30**
Testing and recording results	• Completeness of testing and recording • Evidence of working towards a goal		**30**
One page of design concepts	• A range of quality ideas with annotations and different views • Ability to communicate graphically		**10**
Design of experimental aircraft	• Creativity • Originality • Success in achieving adequate lift • Good take-off and landing		**30**
Quality of construction of experimental aircraft	• Miminal use of glue • Symmetry • Accuracy in marking out and cutting		**10**
Complete the general evaluation questions	• Considered responses		**5**
Folio	• Work presented neat, accurate and stapled		**5**
Total			**120**