



Curriculum Night: 6th Grade Design Devin Saywers

Willows Preparatory School 2017-18

I.B. Learning Aims & Goals

- Ability to utilize the design cycle to develop, evaluate, and iterate projects.
- Understand the fundamental programming concepts such as: data, functions, control flow structures, data structures, and debugging.
- Model and sketch ideas for solutions to problems.
- Understand time management and foster a positive mindset

I.B. Learning Objectives

IB learning objectives are determined across four objective criterion:

- Objective A: Knowing and Understanding
- Objective B: Developing Ideas
- Objective C: Creating the Solution
- Objective D: Evaluating

I.B. Grading Criteria

Students will receive a local grade which is percentage based and letter referenced.

Additionally all IB objective criterion will be formally assessed twice throughout the year. These will be informally assessed on a continual basis. The success in the objective criterion is measured on a 0-8 scale. Limited competency is graded 1-2, adequate 3-4, substantial 5-6 and excellent 7-8. Further detail, specific to Mathematics, regarding the grade descriptors is available in OneNote

A cumulative score is calculated for the year using the criterion scores and this is referenced on a scale of 1-7.



The following is an outline of the content for the 6th Grade Design Course. Projects and homework will be assigned to help students meet the IB learning aims and goals.

Trimester 1

Intermediate computer skills such as Excel and 3D modeling. Collecting and using data to inform and evaluate. Designing, building, and iterating wood race cars.

Trimester 2

Understand fundamental internet concepts. Effectively use online resources for research. Utilize HTML, CSS, and JavaScript to develop websites.

Trimester 3

Data structures, functions, control flow structures, and simple algorithms with Python.