## **Graphics Programming** Grade 10

Prerequisite: None, but Computer Technology or equivalent knowledge is helpful

Leads to: Good preparation for IBDP Computer Science

This course emphasizes **programming** as the primary computer tool and **graphics** as the primary application area.

Students learn to write programs in **Java** and **JavaScript** . Projects include:

- slide show with effects
- animated video game
- educational quiz program
- graphical screen-saver
- animated gambling game
- text + graphics adventure game
- mathematical transformations
- scientific simulations
- web-page animations
- using various graphics design tools



Much of the assessment involves practical programming assignments, completed in class time with ample teacher assistance. There are also a few written tests covering fundamental concepts and vocabulary.

Students develop and improve their ability to think clearly and logically. They learn to organize and analyze their own thinking and to express their thoughts as algorithms in a programming language. Many students find that this work improves their understanding of some mathematics topics.

This course is appropriate for students who already have a good set of basic IT skills and are interested in learning something more technical, as well as students who want a good preparation for IB Computer Science.