

PARKLAND SECONDARY SCHOOL

"An Innovative, Inspiring, Inclusive Learning Community"

Course: Computer Science (SL)

Group 4 - Computer Science Aims

The aims of the course are to enable students to:

- 1. Gain an appreciation of modern computing technology and its reach
- 2. Look at ways to solve problems with computational logic
- 3. Foster a sense of play and experimentation with new tools
- 4. Examine the moral and ethical issues surrounding the use of technology
- 5. Take a broader view of how computer technology is implemented globally
- 6. Pursue collaborative opportunities
- 7. Develop passion and personal interests around computer science

Group 4 Computer Science Assessment objectives

Students will be expected to demonstrate the following.

- 1. Computer Organization Architecture and foundations
- 2. System fundamentals System design, UI and support
- 3. Networking Networking fundamentals
- 4. Computational Thinking Logic and algorithmic based solutions, abstract thinking
- 5. Web Science Internet infrastructure and organization



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Group 4 - Computer Science (SL) Topics

Syllabus component	Teaching hours
	SL/HL
Topic 1 : System Fundamentals	20
Topic 2 : Computer Organization	6
Topic 3: Networks	9
Topic 4 : Computational Thinking, problem-solving and programming	45
Topic 5: Web Science	30
Course exploration	40
Group 4 Project & Internal Assessment	
Total teaching hours	150

Evaluation

Assessment Component	Weighting
External Assessment (3 hours)	70%
Paper 1	45%
Paper 2	25%
In each paper students will be expected to know and understand; apply and use; and construct, analyse and evaluate ideas and concepts from the course.	
Internal Assessment	30%
Students develop a solution for a client, for a specific problem.	

Resources: Hardware and software are provided by the school for core course work, but personal resources may be required if students wish to pursue personal projects.