Diploma Programme Course Outline

Name of the DP subject	Computer Science (COS)

Higher - HL **Standard – SL**

Term 1 ☐ **Term 2** ☐

- Both SL and HL students are taught in the same class.
- The last semester has been kept down due to revision and the exams.
- Group 4 project is based on models that are used in some schools

YEAR 2

UNIT/TOPIC	TOPIC/CONCEPT	Month	ASSESSMENT COMPONENTS
• **Topic # 5** • **Topic # 6** • **Object Oriented Programming**	**SL/HL core:** D 3.9–D 3.10 Program development IA ▪ Criteria A ▪ Criteria B ▪ Coding **HL** • **6.**1 Resource management o System resources ▪ 6.1.1– 6.1.4 o Role of the operating system ▪ 6.1.5– 6.1.9 Case study ▪ 2024 – o Synthesis and evaluation of research linked to case study **Review - HL** • 5.1 Abstract data structures o Applications ▪ 5.1.18–5.1.20	August	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 ▪ IA

• **Topic # 5** • **Topic # 7** • **Object Oriented Programming**	**SL/HL core:** **IA** ▪ Criteria C ▪ Coding **SL/HL core: OOP** ▪ D 3.9–D 3.10 Program development ▪ D 2.7–D 2.10 Features of OOP **HL** ▪ **7.1** Control o Centralized control systems ▪ 7.1.1– 7.1.6 o Distributed systems ▪ 7.1.7– 7.1.8 **Review** ▪ 5.1 Abstract data structures o Abstract data structures ▪ 5.1.4–5.1.10 o Linked Lists ▪ 5.1.11–5.1.13	September	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 ▪ IA
• **Topic # 1** • **Topic # 7** • **Object Oriented Programming** • **Case Study**	**SL/HL core:** **IA** ▪ Criteria C ▪ Coding **SL/HL core: OOP** ▪ D 3.9–D 3.10 Program development ▪ D 2.7–D 2.10 Features of OOP **HL** ▪ **7.1** Control o Centralized control systems ▪ 7.1.1– 7.1.6 o Distributed systems ▪ 7.1.7– 7.1.8 **Review** ▪ 5.1 Abstract data structures	October	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 IA

	○ Abstract data structures ▪ 5.1.4–5.1.10 ○ Linked Lists ▪ 5.1.11–5.1.13		
• **Topic # 1** • **Topic # 7** • **Object Oriented Programming** • **Case Study**	**SL/HL core:** **TOK** ▪ Topic 1 - 1.2.3, 1.2.11 & 1.2.16 ▪ Topic 7 - 7.1.6 ▪ OOP – D.3.10 **SL/HL core: OOP** ▪ D 3.9–D 3.10 Program development ▪ D 2.7–D 2.10 Features of OOP **IA** ▪ Criteria C ▪ Criteria D ▪ Criteria E Case study ▪ 2024 – ○ Research linked to case study, analysis of information	November	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 ▪ IA
• **Topic # 1** • **Topic # 5** • **Object Oriented Programming** • **Case Study**	**SL/HL core: OOP** ▪ D 3.9–D 3.10 Program development ▪ D 2.7–D 2.10 Features of OOP **IA** ▪ **1ST Draft IA due** Case study ▪ 2024 – Synthesis and evaluation of research linked to case study **Review** ▪ **SL/HL core** ○ Topic 1 ▪ **HL** ▪ 5.1 Abstract data structures ○ Trees ▪ 5.1.14–5.1.17	December	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 ▪ IA

• **Topic # 2** • **Topic # 3** • **Topic # 4** • **Object Oriented Programming** • **Case Study**	**SL/HL core: OOP** ▪ D 3.9–D 3.10 Program development ▪ D 2.7–D 2.10 Features of OOP IA ▪ Final IA due **Review** ▪ **SL/HL core** ○ Topic 2 ○ Topic 3 ○ Topic 4	January	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 ▪ IA
• **Topic # 5** • **Topic # 6** • **Topic # 7** • **Object Oriented Programming** • **Case Study**	**Review** ▪ **HL** ○ Topic 5 ○ Topic 6 ○ Topic 7	February	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 ▪ IA
• **All Topics**	**Work IB Past Papers**	March	▪ Paper 1 ▪ Paper 2 ▪ Paper 3 ▪ IA
	Final Review **IB Exams**	April	
	IB Exams	May	

All Diploma Programme courses are designed as two-year learning experiences.