

Lesson Plan (Theory)

YEAR 9 - Computer Science (Week 4)-2021-2022

Subject	Computer Science
Class/ Section	Year 9(A-F)
Week	19 th -23 rd September
Work send to students by	Google classroom
Total number of lessons per week	2
Unit/Topic	Unit 1: Problem solving Topic: Understanding Algorithms
Key vocabulary	Algorithm, Flowchart
Lessons 1,2 –Live Zoom lesson along with face to face instruction for students present on a particular day Work will be assigned in Google classroom which will be matched to the student's ability.	 Specific Learning objectives To be able to interpret algorithms as flowchart amend/create algorithms and flowchart determine the output of algorithm for a given set of data Specific Intended Learning Outcomes Students will be able to interpret algorithms as flowchart Should will be able to determine the output of algorithm for a given set of data

Tasks/Activities

- -Student should complete the flowchart for the algorithm.
- -Write the expected outcome for the given input.
- Output value from an algorithm

They will be put in break out rooms during Zoom lesson to encourage collaborative learning

Assessment Criteria/ Essential questions

Essential Question that are according to the Pearson Edexcel specification

Activity questions will be posted in Google classroom

For example, assessment objectives expected by the board with respect to the above question is listed below.

AO1: Demonstrate knowledge and understanding of algorithms as flowcharts

AO2: Apply knowledge and understanding of algorithms as flowcharts

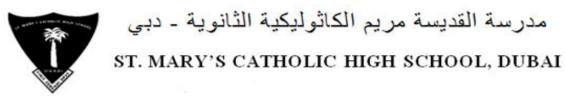
Resources

https://qualifications.pearson.com/en/qualifications/edexcelintern ational-gcses-and-edexcel-certificates/international-gcsecomputer-science-

2017.resources.html?filterQuery=category:PearsonUK:Publisher %2FPearson PowerPoint presentation

Video links:

https://www.youtube.com/watch?v=SWRDqTx8d4k https://www.youtube.com/watch?v=BQP2doXjVlQ https://www.youtube.com/watch?v=BVyuZ7icw6M



Lesson Plan (Practical)

YEAR 9 - Computer Science (Week 4)-2021-2022

Subject	Computer Science (CS)
Class/ Section	Year 9(A-F)
Week	19 th -23 rd September
Work send to students by	Google classroom
Total number of lessons per week	2
Unit/Topic	Python Programming
Key vocabulary	Descriptive names, comments, indentation, order of precedance
Lessons 1,2–Live Zoom/GC lesson along with face to face instruction for students present on a particular day Work will be assigned in Google classroom which will be matched to the student's ability.	 Specific Learning objectives To be able to understand the benefit of producing programs that are easy to read understand descriptive names, comments, indentation, and operators. Specific Intended Learning Outcomes Students will be able to know How to use indentation the order of precedence of operators Use of relational & logical operators Use of truth tables of AND,OR & NOT

Tasks Activity questions in Google Classroom on: Identify the line numbers where indentations are used Output from relational and logical operators Complete the truth tables **Assessment Criteria/** -Calculate result using the correct order of operations. **Essential questions** - Identify line numbers where indentations For example, assessment objectives expected by the board with respect to the above question is listed below. AO1: Demonstrate knowledge and understanding of Python programming AO2: Apply knowledge and understanding of Python code PowerPoint presentation Resources Video links:

https://www.youtube.com/watch?v=-wDaVLkKOiU https://www.youtube.com/watch?v=v5MR5JnKcZI&t=2s https://www.youtube.com/watch?v=0-hzxfkpHy8&t=37s