



COURSE OUTLINE: Info Tech 8, Year 2015-2016

Taught By: A. WONG

Course Description:

Information Technology 8 develops practical computer skills and teaches software use while fostering inquiry skills that are at the heart of the Middle Years Programme. This process helps students become more knowledgeable and develop as thinkers. Students will also reflect upon their progress as learners. During the term, students enhance their repertoire of communication options essential to our modern world. Students will work towards producing professional quality results and maintain an electronic portfolio that can be submitted with their resume to employers or post-secondary institutes.

Objectives:

As an integral part of the International Baccalaureate Middle Years Program the Aims and Objectives of the study of Information and Communication Technology are to:

- enjoy the design process, develop an appreciation of its elegance and power
- develop knowledge, understanding and skills from different disciplines to design and create solutions to problems using the design cycle
- use and apply technology effectively as a means to access, process and communicate information, model and create solutions, and to solve problems
- develop an appreciation of the impact of design innovations for life, global society and environments
- appreciate past, present and emerging design within cultural, political, social, historical and environmental contexts
- develop respect for others' viewpoints and appreciate alternative solutions to problems
- act with integrity and honesty, and take responsibility for their own actions developing effective working practices.

At the end of the course the student should be able to:

- i. explain and justify the need for a solution to a problem for a specified client/target audience
 - ii. identify and prioritize the primary and secondary research needed to develop a solution to the problem
 - iii. analyse a range of existing products that inspire a solution to the problem
 - iv. develop a detailed design brief which summarizes the analysis of relevant research.
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- i. develop a design specification which clearly states the success criteria for the design of a solution
 - ii. develop a range of feasible design ideas which can be correctly interpreted by others
 - iii. present the final chosen design and justify its selection

- iv. develop accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution.
 - i. construct a logical plan, which describes the efficient use of time and resources, sufficient for peers to be able to follow to create the solution
 - ii. demonstrate excellent technical skills when making the solution
 - iii. follow the plan to create the solution, which functions as intended
 - iv. fully justify changes made to the chosen design and plan when making the solution
 - v. present the solution as a whole, either:
 - a. in electronic form, or
 - b. through photographs of the solution from different angles, showing details

- i. design detailed and relevant testing methods, which generate data, to measure the success of the solution
- ii. critically evaluate the success of the solution against the design specification
- iii. explain how the solution could be improved
- iv. explain the impact of the solution on the client/target audience.

Course Content for Term:

Students will complete up to three areas: Applied Digital Communications, Digital Media Development, and Computer Programming.

- Microsoft Word (ADC)
- Microsoft PowerPoint (ADC)
- Adobe Photoshop (DMD)
- Code.org (CP), time permitting

General Assessment:

- IB Projects will be assessed according to the IB-MYP rubrics for Technology:
 - Criterion A – Inquiring and Analyzing
 - Criterion B – Developing Ideas
 - Criterion C – Creating the Solution
 - Criterion D – Evaluating
- Assessment will be based on projects and one presentation.
- There will NOT be a final exam.
- Students may earn bonus marks through extra work.

Classroom resources:

- iMac's

Resource Materials to be supplied by students:

- It is helpful if a student has an available home computer to complete assignments