Stockton Collegiate International Schools
MYP Technology
Level 2, Grade 7

I. Course Description

The technology course implemented by Stockton Collegiate International emphasizes the process of taking abstract and theoretical ideas and practically working those thoughts into actual solutions to real-life problems. Encouraging innovation and creativity by creating risk-takers, this course works through the lens of intercultural awareness, communication, and holistic learning. Intercultural awareness becomes increasingly necessary as different ideas and markets collide through the transport of modern technology. Students must learn to understand other cultures as both a market and a community. Communication is also vital to technology. New designs and solutions are only as good as their potential to be used. Communication through marketing can be as important as the innovations themselves. By the end of the course, students will begin to see themselves as an integral part of the larger community, holistically combining all aspects of their skills and abilities with the larger global community. Students will be encouraged to accept the many attributes of the learner profile as a part of their own character through activities that emphasize these traits. Students will practice inquiry through questioning the norms inherited through previous generations and innovating through taking risks. As they build their personal skill-sets in technology, they will become increasingly knowledgeable with the ultimate goal of applying their ideas in a globally significant way. Through the design cycle students will stretch themselves by critically and creatively approaching complex problems in the manner a thoughtful thinker should. Student work will emphasize local and globally significant issues so as to make connections with the impact of their actions in a principled, open-minded and caring manner. Every student will practice communication of their finalized ideas while transferring ideas through collaboration during the design process. The work inside of this course is designed to help students develop and unite their imaginative potential with various technologies in order to engineer innovative solutions to a multitude of real-world scenarios. As a result, Technology as a course is not simply giving students exposure to popular software or tools, but teaching the creative processes necessary in any problem-solving application.

II. Standards, Aims and Objectives

By the end of the Middle-Years Program (grade 10) students should have a deep understanding of all steps in the design process and should be able to employ each step effectively in designing a solution.

MYP Objectives	**National Education Technology Standards**
Investigate: Students identify problems and create design requirements that guide their innovation process as documented in the design brief.	**Research and Information Fluency**
Design: Students design possible solutions by considering design requirements in the creation of their innovation ideas.	**Creativity and Innovation; Communication and Collaboration**
Plan: Students choose one innovation to create and plan the logical process the will lead to completion.	**Creativity and Innovation; Critical Thinking, Problem Solving, and Decision Making**
Create: Through the use of proper techniques/equipment and their personalized plan, students will create their product/solution at an appropriate quality.	**Technology Operations and Concepts**
Evaluate: Students reflect and evaluate both their product/solution and their use of the design cycle	**Critical Thinking, Problem Solving, and Decision Making**
Attitudes in Technology: Students consistently demonstrate that attitudes necessary to successfully design using technology.	**Digital Citizenship**

III. Areas of Interaction

Technology is a subject that actively engages all areas of interaction. Problem solving is an open ended endeavor that demands a resourceful use in implementing all possibilities. Through each step of the design cycle, students rely upon their personal approaches to learning in directing their solution to a given problem. As such, the process of designing a solution demands that a student authentically and effectively use different approaches to learning which will be developed throughout the process. Students will also be designing a number of solutions to community-based and environmental issues. This includes both investigation of and solutions for specific scenarios. The reflective emphasis in the design cycle helps students work through a number of issues apparent in health and social education. They will reflect on their current state, as well as that of their communities, and discover ways to more effectively work as a creative force in self

and communal change. This holistic emphasis rests on the understanding of the development and use of technology by each student as an integral part of human ingenuity.

IV. Texts and resources

A variety of resources will be provided for the students including (but not limited to) podcasts, internet, music, and computer software. Specifically, the Technology course will access and utilize a number Apple based software that focuses on helping the student market themselves in the 21st century. This software will includes iweb, imovie, garageband, etc. Adobe products will be employed, including, but not limited to, Photoshop, Illustrator, and Flash. Other word processing and research based software will be used in conjunction with the Apple lineup.

V. Methodology

Technology and the processes of design demand a strong emphasis on student-based experience. As a result, much of the course lessons focus on student discovery through application. By focusing on directed discovery, students will receive instruction and guides to building skills sets. The majority of student activity will be based in learning through doing. Students will also spend time in reflective group discussion focused on taking existing skills and reflecting on ways to make our efforts more effective. The student projects purposed for creating specific skill sets will be developed through collaboration with other MYP instructors. Over the five years committed to Technology students will be expected to shift in the follow ways:

MYP earlier years	to	MYP final years
simple units of work		complex units of work
skills development to skills applied		design situations
limited range of outcomes		open-ended challenges
guided project content		student-managed projects
short projects		long projects
students designing for themselves		to students designing for others
emphasis placed on individual parts of the design cycle		all stages of the design cycle fully addressed
contrived challenges		real-life challenges

By emphasizing cross-curricular collaboration, students will transfer technology based activities in and out of other course work.

VI. Methods of assessment

The single most important aim of assessment at Stockton Collegiate is to support and encourage student learning. Teachers will use formative assessments to guide their instruction day-by-day. These assessments are generally not included in the students' final grades. Summative assessments are the students' opportunity to demonstrate their level of achievement at the end of a unit and are included as part of a final grade. The MYP approach to assessment recognizes the importance of the processes of learning as well as the products of learning. The MYP assessment model is criterion-related, meaning that it is based upon pre-determined criteria to which all students (and parents) have access.

Name of Unit	Unit Question	Assessment
From Spatial of Special	How do physical environments affect our quality of life?	Design brief and final design product

VII. Grading policy including the use of MYP criteria

Grades will be determined using a combination of MYP marks and more traditional assessments. These grades will be combined to produce a composite mark of A, B, C, D, or F at the end of each semester according to traditional percentage guidelines (90-100: A; 80-89: B; 70-79: C; 60-69: D). Heavy emphasis will be given to a student's level of competency at the end of the grading period.