Grade G9

Time	Content	Skills	Assessment
10 weeks	**Radio ISOP** The aim of this unit is to introduce students to sound recording and editing by creating an audiobook. They will be asked to learn and use sound editing software (for example Audacity) and the correct audio recording equipment.	**At the end of this unit students should have a knowledge and understanding of:** • The way sound is represented and recorded on a computer • Recording devices • the use of Audacity as an example of sound editing software • how to create an abridgment and a script of the audiobook • how to use sound effects effectively and in an attractive way in the audiobook • sound formats (mp3, wav, wma, etc.) • the creating of a product of high quality that attractive and of high-quality • appropriate testing and proofing methods	**Students will be graded for the following tasks:** • Investigation Stage Report • Design Stage Report (the Script) • Plan Stage Report • Create stage Report (includes Process Journal) • Evaluate Stage Report • Final Product • Attitude during project (participation during discussions, work independence, attitude towards safety and co-operation with others)
7 weeks	**Can you be fooled?** The aim of this unit is to introduce students to photo manipulation and editing techniques. They will be asked to create a fake photo depicting some part of the school.	**At the end of this unit students should have a knowledge and understanding of:** • The ways in which photos can be manipulated – how these techniques and practices affect our lives and choices by "bending" reality around us • Image file formats (jpg, gif, bmp, etc.). Image compression – lossless and lossy. Which formats do we use and when? • Advanced photo editing tools in GIMP • Scaling, rotating… the "perfect fit"	**Students will be graded for the following tasks:** • Investigation Stage Report • Design Stage Report • Plan Stage Report • Create stage Report (includes Process Journal) • Evaluate Stage Report • Final Product • Attitude during project (participation during discussions, work independence, attitude towards safety and co-operation

			with others)
7 weeks	Store it! The aim of this unit is to introduce the students to the concept of databases. The students will be asked to create a model representation of a library/video rental store using a database system like OpenOffice.Base	**At the end of this unit students should have a knowledge and understanding of:** • The concept of a database • How databases are used and how they developed • Ways of designing databases (1 to 1, 1 to n, n to n relationships) • Basic UML database notation • The basic functions of OpenOffice.Base • Creating tables • Types of data • Simple queries to the database and ways of interpreting the results	**Students will be graded for the following tasks:** • **Investigation Stage Report** • **Design Stage Report (using UML notation)** • **Plan Stage report** • **Create stage Report (includes Process Journal)** • **Evaluate Stage Report** • **Final Product (based on competition results)** • **Attitude during project (participation during discussions, work independence, attitude towards safety and co-operation with others)**
7 weeks	Extra Unit (Olympic year) – ECO-javelin (interdisciplinary unit with PE, History and Physics, all MYP classes complete this project simultaneously) The aim of this unit is to teach the students design and planning skills while they produce their own javelin made from recycled	**At the end of this unit students should have a knowledge and understanding of:** • The need to use recycled materials whenever it's possible • The physical characteristics of different materials and how those characteristics relate to the effectiveness of their product • Material-oriented design and planning • Ways of connecting and binding materials • Measuring weight of materials and components • the creating of a product that is effective, functional and practical • **testing** and constant product improvement based on those tests	**Students will be graded for the following tasks:** • **Investigation Stage Report** • **Design Stage Report** • **Plan Stage report** • **Create stage Report (includes Process Journal)** • **Evaluate Stage Report** • **Final Product (based on competition results)** • **Attitude during project (participation during discussions, work independence, attitude**

	materials for the School Olympic Games.		towards safety and co-operation with others)
7 weeks	Extra Unit – Spaghetti Bridges (all MYP classes complete this project simultaneously)	**At the end of this unit students should have a knowledge and understanding of:** • The ways bridges are constructed – types of bridges, lengths, sizes, etc • Compression and tension in bridge design • Using computer aided design (CAD) to simulate future events and improve design quality (WestPoint Bridge Designer) • Orthographic projection and it's uses • How shapes can affect and change the strength of construction elements • Using a hot-glue gun • Different ways of connecting and joining pieces of material to make rigid shapes (with the use of linguine) • self-evaluation • the creating of a product of high quality and durability, at the same time being economical and practical	**Students will be graded for the following tasks:** • Investigation Stage Report • Design Stage Report • Plan Stage report • Create stage Report (includes Process Journal) • Evaluate Stage Report • Final Product (based on competition results) • Attitude during project (participation during discussions, work independence, attitude towards safety and co-operation with others)