Informační a komunikační technologie (ICT)

Ř.	Ročník / Year	Předmět / Subject	Výstupy ŠVP G "Sunny Canadian International School - most do celého světa" / Outcomes of School education program	Učivo (pojmy) / Subject Matter	Průřezová témata / Cross-curricular Subjects	Mezipředmět. vazby / Connections to Other Subjects	Poznámka / Notes
1	4G1	ICT	Student develops their own blog using a free blogging site (e.g.; blogger). The blog includes multimedia aspects that they upload, and references to external sources of information.	Software, Internet, Information, information ethics, publishing	MV	Čj Aj Fj Nj	
2	4G1	ICT	Student looks at the core components, and peripheral components of computers. They research functions and relationships between parts and create a poster to demonstrate the functions and relationships of the parts.	Hardware, information networks, the digital world, internet, information		M Fy	
3	4G1	ICT	Students are introduced to the functionality of cloud-based productivity software (i.e., google docs). They create an interactive notebook using information from another course (e.g., biology). The interactive notebooks include both internal links (e.g., bookmarks), and external links (e.g., hyperlinks), and proper references.	software, information networks, the digital world, data mainenance and preservation, internet, information, information ethics/legislation, publishing, application software for work with information		Bi S	
4	4G1	ICT	Student looks at common intellectual copyright concepts and defines the term plagiarism, as well as develops strategies to avoid plagiarism. They also look at methods of evaluating the quality of internet resources, including why certain popular sites may not be as good as they need them to be. This culminates in an essay describing what they have learned with a properly created bibliography and inline references.	software, information networks, the digital world, internet, information, information ethics/legislation, publishing, application software for work with information		OSVZ	

5	4G1	ICT	Using MS Word students look at pieces of writing of various qualitative levels. They then use the functionality of word (i.e., highlighting, and inserting comments) to show the author where corrections have to be made, as well as providing feedback to the author to guide the author in their learning process.	software, the digital world, publsihing, application software for work with information		Čj Aj Fj Nj	
6	4G1	ICT	Beginning with MS Word student creates a simple budget through inserting table and splitting/merging cells. They then take this table and insert this table into MS Excel to create a budget that tracks changes in real-time through the use of in-built formulae. This budget must be properly organized with rows of alternating colours, and borders of various arrangements.	information science, software, data maintanance and preservation, publishing, application software for work with information		M	
7	4G1	ICT	Student is introduced to the concept of computer languages, and the types/levels thereof. They then research the development of the various languages, including why they were developed, why they rose to prominence or fell away. This information is then presented through an MS Powerpoint presentation.	software, information networks, the digital world, internet, information, publishing, application software for use with information	MV	Hv Vv	
8	4G1	ICT	Student is introduced the the fundamental principles of computer based logic through the development of a simple video game within the Scratch 2 software environment.	software, the digital world, publsihing, application software for work with information, algorithmic treatment of problems		M	
9	4G1	ICT	Student creates from scratch a „professional“ type news cast. This begins with the creation/development of stories in groups, research on the internet, the writing of a script, recording, editing, and inserting post-production effects.	Hardware, software, information networks, the digital world, data maintenance and preservation, internet, information, sharing specialized information, information ethics/legislation, publishing, application software for work with information, algorithmic treatment of problems			

10	4G1	ICT	Student creates from scratch a „professional“ type news cast. This begins with the creation/development of stories in groups, research on the internet, the writing of a script, recording, editing, and inserting post-production effects.	Hardware, software, information networks, the digital world, data maintenance and preservation, internet, information, sharing specialized information, information ethics/legislation, publishing, application software for work with information, algorithmic treatment of problems		OSVZ	
11	4G2	ICT	Student develops their own blog using a free blogging site (e.g.; blogger). The blog includes multimedia aspects that they upload, and references to external sources of information.	Software, Internet, Information, information ethics, publishing		Čj Aj Fj Nj	
12	4G2	ICT	Student looks at the core components, and peripheral components of computers. They research functions and relationships between parts and create a poster to demonstrate the functions and relationships of the parts.	Hardware, information networks, the digital world, internet, information			
13	4G2	ICT	Students are introduced to the functionality of cloud-based productivity software (i.e., google docs). They create an interactive notebook using information from another course (e.g., biology). The interactive notebooks include both internal links (e.g., bookmarks), and external links (e.g., hyperlinks), and proper references.	software, information networks, the digital world, data mainenance and preservation, internet, information, information ethics/legislation, publishing, application software for work with information		Ge	
14	4G2	ICT	Student looks at common intellectual copyright concepts and defines the term plagiarism, as well as develops strategies to avoid plagiarism. They also look at methods of evaluating the quality of internet resources, including why certain popular sites may not be as good as they need them to be. This culminates in an essay describing what they have learned with a properly created bibliography and inline references.	software, information networks, the digital world, internet, information, information ethics/legislation, publishing, application software for work with information			

15	4G2	ICT	Using MS Word students look at pieces of writing of various qualitative levels. They then use the functionality of word (i.e., highlighting, and inserting comments) to show the author where corrections have to be made, as well as providing feedback to the author to guide the author in their learning process.	software, the digital world, publishing, application software for work with information			
16	4G2	ICT	Beginning with MS Word student creates a simple budget through inserting table and splitting/merging cells. They then take this table and insert this table into MS Excel to create a budget that tracks changes in real-time through the use of in-built formulae. This budget must be properly organized with rows of alternating colours, and borders of various arrangements.	information science, software, data maintanance and preservation, publishing, application software for work with information		M	
17	4G2	ICT	Student is introduced to the concept of computer languages, and the types/levels thereof. They then research the development of the various languages, including why they were developed, why they rose to prominence or fell away. This information is then presented through an MS Powerpoint presentation.	software, information networks, the digital world, internet, information, publishing, application software for use with information		M Fy	
18	4G2	ICT	Student is introduced the the fundamental principles of computer based logic through the development of a simple video game within the Scratch 2 software environment.	software, the digital world, publsihing, application software for work with information, algorithmic treatment of problems	OSV	OSVZ Bi	
19	4G2	ICT	Student creates from scratch a „professional“ type news cast. This begins with the creation/development of stories in groups, research on the internet, the writing of a script, recording, editing, and inserting post-production effects.	Hardware, software, information networks, the digital world, data maintenance and preservation, internet, information, sharing specialized information, information ethics/legislation, publishing, application software for work with information, algorithmic treatment of problems		Čj Aj Fj Nj	

20	4G2	ICT	Student creates from scratch a „professional“ type news cast. This begins with the creation/development of stories in groups, research on the internet, the writing of a script, recording, editing, and inserting post-production effects.	Hardware, software, information networks, the digital world, data maintenance and preservation, internet, information, sharing specialized information, information ethics/legislation, publishing, application software for work with information, algorithmic treatment of problems			
21	4G3	ICT	Using MS Word student searches for important terms and creates an end of document index for individual terms, and topics that span more than one page.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		Čj Aj Fj Nj	
22	4G3	ICT	Using MS Word student reviews the use and limitations of spell-checker and grammar-checker, as well as inserting comments. They will also learn the way of tracking changes in MS Word.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		M	
23	4G3	ICT	Student enters data collected from various external resources and uses said data to create various types of charts in MS Excel.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		M	
24	4G3	ICT	Student inputs data to create more advanced graphics in MS Excel.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		M	
25	4G3	ICT	Using MS Office student collates statistical data, then uses advanced functions of the softwared to organise the data for easier interpretation.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		M	

26	4G3	ICT	Statistical data is now graphed and diagramed.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		M Fy	
27	4G3	ICT	Student uses created databases to represent data graphically, as well as developing proper querries, including limits of database querries and search functions.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		M	
28	4G3	ICT	Student is introduced to the basic types of graphics files, and basic graphics editors/enhancement tools. They observe their functions and limitations so as to determine what tools should/could be used to various needs. They will then use some of these graphics tools for specific tasks.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		Vv	
29	4G3	ICT	Student uses more advanced graphics editors (e.g., Photoshop, The Gimp, Illustrator, and/or Inkscape) to manipulate various tyypes of graphics files.	Software, the digital world, data maintenance and preservation, publishing, application software for work with information, algorithmic treatment of problems		Vv	
31	4G4	ICT	Student looks at common algorithms used in computer science/ICT related fields and sees their applications.	Information science, software, data maintenance and preservation		M	
32	4G4	ICT	Student now looks at how changing the variables in algorithms affects results and functions within the algorithms.	Information science, software, data maintenance and preservation		M	
33	4G4	ICT	Student looks at how algorithms can take into account systems that are not necessarily syncronouos in their evolution.	Information science, software, data maintenance and preservation		M	
34	4G4	ICT	Student examines how macros can be programmed either in software or programming languages in order to reduce wasting time on repetitive actions.	Information science, softwared, data maintenance and perservation, the digital world, publishing, application software to work with information, algorithmic treatment of problems.			

35	4G4	ICT	Student learns to program simple applications using a high level language (e.g.; C++, Java, HTML, etc.)	Information science, hardware, software, the digital world.		M	
36	4G4	ICT	Student looks at linear and non-linear audio editors, their functions, limitations, and uses. They then create an audio-drama in the style of old time radio shows in a non-linear audio editor.	Information science, hardware, software, information networks, the digital world, internet, publishing, application software for work with information	MV	Hv	
37	4G4	ICT	Student imports video into a non-linear video editor, and re-arranges various files into a coherent order.	Information science, hardware, software, the digital world, internet, publishing, application software for work with information	MV	Hv Vv	
38	4G4	ICT	Using a non-linear video editor the student will apply various effect to their edited video project, and export the final video into various qualities. They will discuss why one might have the same video in different resolutions.	Information science, hardware, software, the digital world, internet, publishing, application software for work with information	MV	Hv Vv	
39	4G4	ICT	Student learns what cummulative recurrence is and its relationship to modern computing.	Information science, software, data maintenance and preservation		Bi S	