

Information & Communications Technology (ICT) Course Descriptions

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Grade 10

ICT: Game Development 10 (open to grades 9-10)

Gaming and programming are one of the most popular choices for careers in the technology industry. "Is it hard?" or more often asked, "Is it easy?" is a tricky question to answer. Some students find it quite easy; some students find it hard. Labs, problem solving and a lot of challenges from super easy to super hard. The best thing is that everything you learn in programming at the school level, applies to programming in any language at a higher level. So why not create a pong game or a blackjack game and earn some credits for doing it.

Grade 11

ICT: Computer Coding 11 (open to grades 10-12)

Programming websites, games, and even cell phone apps all rely on code that we use every day - often without realizing it. This coding stream is designed for students who want to explore what programming is all about. It begins with core concepts using Python, then progresses to JavaScript. Then students are developing independent projects, sharpen their problem-solving skills, and gain the ability to apply coding techniques to create functional programs.

ICT: Game Development 11 (open to grades 10-12)

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Web Page Design: Graphic Production 11 (open to grades 9-12)

This is an excellent course for students who are developing and art and design portfolio. Experimentation and exploration of new digital/traditional techniques and ideas will be stressed. There

is the opportunity to work on projects for real clients. Self-planned and directed projects will be a means of expression and evaluation.

Technology Leadership 11: Digital Media

Students in this course could acquire practical skills, knowledge, and experience in scheduling, filming, and producing the recording of different school events. Students work on independent self-managed plans with minimum supervision and will be expected to demonstrate self-initiative and to be committed to the program. The instructor can expand the level of difficulty. This class could be scheduled "outside" timetable, and an application form is required.

Technology Leadership 11: IT

This is a leadership course for students who like to solve technology issues. No experience necessary as there will be on-the-job training. Students will go around the school helping students and teachers with technology issues such as PC startup problems, cabling/wiring issues, projector setup, iPad configuration, software problems, website updates, wifi connectivity, and computer setup/replacement. Good communication skills are essential as TL students will be explaining how to fix issues to others. Students should be prepared to do IT support both in and occasionally outside of class time. Marking will be based on a well-documented journal of problems encountered and the solutions applied to correct them, in addition to a Tech Leadership evaluation form based on the learning standards for this course. If this course interests you, pick up a leadership application form from your counsellor to sign-up for Tech Leadership next year. See Mr. Wong in G201 for more details.

Grade 12

ICT: Computer Coding 12

This programming course further introduces students to JAVA language. Students do not need any programming experience, but if they have some experience already would be helpful. Students will start with the basic features of the Java language and progress until they have successfully completed the AP CS A curriculum in programming. If you enjoy a friendly, hands-on environment while developing your coding skills and self-expression, this is the course for you!

ICT: Game Development 12

Game Development is a self-directed team-based course that requires students to be highly motivated. The course focuses on reinforcing and further mastering the concepts of animation and design, software proficiency and storytelling. Self-planned and self-directed projects will be a means of expression and evaluation.

Web Page Design: Graphic Production 12

This is an excellent course for students who are developing an art and design portfolio. Experimentation and exploration of new digital/traditional techniques and ideas will be stressed. There is the opportunity to work on projects for real clients. Self-planned and directed projects will be a means of expression and evaluation.

Technology Leadership 12: Digital Media

Students in this course could acquire practical skills, knowledge, and experience in scheduling, filming, and producing the recording of different school events. Students work on independent self-managed plans with minimum supervision and will be expected to demonstrate self-initiative and to be committed to the program. The instructor can expand the level of difficulty. This class could be scheduled “outside” timetable, and an application form is required.

Technology Leadership 12: IT

This is a leadership course for students who like to solve technology issues. No experience necessary as there will be on-the-job training. Students will go around the school helping students and teachers with technology issues such as PC startup problems, cabling/wiring issues, projector setup, iPad configuration, software problems, website updates, wifi connectivity, and computer setup/replacement. Good communication skills are essential as TL students will be explaining how to fix issues to others. Students should be prepared to do IT support both in and occasionally outside of class time. Marking will be based on a well-documented journal of problems encountered and the solutions applied to correct them, in addition to a Tech Leadership evaluation form based on the learning standards for this course. If this course interests you, pick up a leadership application form from your counsellor to sign-up for Tech Leadership next year. See Mr. Wong in G201 for more details.

AP Computer Science A

Students start by learning the basic features of the Java language and progress until they have successfully completed the equivalent of a first-year university course in programming. In early May, most students chose to write the AP Computer Science Exam to receive university credit for the course. The prerequisites for this course are Coding ICT11, Game Design ICT11 or AP CS Principles. However, if you have not taken any of them, you will have to write an introductory assignment before your enrolment in AP CS A.

AP Computer Science Principles

Computer Science is the new Literacy. This is a course for everybody: introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles prepares students for college and career.