

# Dominican International School



## Basic Computer Education I

Grade Level: G4  
1 Year, 1 Credit

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SY: 2023-2024

### Course Description:

**Computer Education** It is a course that will develop the typing skills of every student. The course will further increase the knowledge about different computer software related to word processing. Our world at present operates using Information and Communications Technology (ICT). It has been changing various areas in the lives of many that will continue in the future. With computers being part of our daily lives, it would be beneficial for every student to learn the basics of computers. This would give them an advantage in the future and enhance their interest in the study of computers particularly word processing. The field of focus would be about MS Word and MS Publisher. Makeblock combines technology and education and lowers the overall threshold of creation by building a STEAM platform covering mechanics, electronics, and software. Makeblock helps children learn from practical usage of technical devices and thinking training so that they will fear no challenges in the future and grow up as individuals who have critical thinking skills and who are socially responsible.

REFERENCE: Desktop Publishing and Computers for Digital Learners Copyright 2017 by Phoenix Publishing House Inc. Exploring ICT Copyright 2012 by Computer Assisted Learning Corporation Office Applications with Basic PC Troubleshooting Copyright 2012 by Computer Assisted Learning Corporation D-Whiz in ICT, Productivity and Entrepreneurial Skills Development 4

REFERENCE/LINKS: [en.wikipedia.org/wiki/Word Processing](https://en.wikipedia.org/wiki/Word_Processing), and [en.wikipedia.org/wiki/desktop publishing](https://en.wikipedia.org/wiki/desktop_publishing)  
<https://www.quora.com/what-are-the-features-of-MS-Word>  
[https://www.quora.com/unanswered/whats good in MS-Word?encoded access](https://www.quora.com/unanswered/whats-good-in-MS-Word?encoded_access)  
[https://en.m.wikipedia.org/wiki/Microsoft Publisher](https://en.m.wikipedia.org/wiki/Microsoft_Publisher)  
<https://www.technopedia/definition/13140/microsoft-publisher>  
<http://officeskills.org/microsoft-office-tutorials.html>  
<https://edu.gcglobal.org/en/powerpoint2016/>

Our school website: <http://www.dishs.tp.edu.tw/>

### Course Content:

The students will learn the different ways of editing and formatting documents, controlling commands, putting an order, and proper page layout. The course contains the basic modules concerning the different software such as MS Word, MS Publisher, and MakeBlock.

### **Course Goal**

- The students will learn the fundamentals of computers
- The students will learn how to use the “ribbon” in MS Word, and MS Publisher
- The students will learn how to edit and format texts or documents
- The students will learn how to use different functions in MS Word, and MS Publisher that would enhance the outcome of the typed text/document
- The students will learn how to insert pictures and tables in MS Word, and MS Publisher
- The students will learn how to layout pages
- The students will learn how to use simple templates in MS Publisher
- The students will learn how to create a simple publication
- The students will learn to produce positive and constructive interactions among the group members
- The students will learn to enhance further their skills in applying the different software
- The students will learn how to organize their ideas in creating the desired outcome
- The students will learn to explore and solve real-life problems in the form of projects, thus enhancing their logical thinking, creativity, teamwork skills, and other abilities.
- The students will value their work and the work of others.
- The students will explore the Programs according to the given instructions.
- The students will be able to follow the instructions given in performing an activity.
- The students will be able to experience creating basic programming in playing games
- The students will be able to develop their problem-solving skills, logic, and creativity.

### **Grading Criteria:**

The quarterly grade will be awarded for all student work based on the following criteria:

- ✓ **Class participation and Seatwork/Homework** - 3/10 of quarterly grade
- ✓ **Major Projects, Quizzes, and Tests**- 3/10 of quarterly grade
- ✓ **Quarterly Exams**- 3/10 of quarterly grade
- ✓ **Deportment** - 1/10 of quarterly grade

### **Student Materials Required:**

- The students will need to bring a flash drive (USB drive) to save their works

### **Classroom Expectations:**

1. Be on time to class; be seated **before** the bell rings.
2. Wear your uniform neatly.
3. Use English at all times.
4. Come prepared with books, assignments, and supplies and without gum, food, or drink (a sealable water bottle is okay).
5. Be respectful of others (especially when speaking), and of school property.
6. Do your best and participate.
7. Ask permission before leaving the class; take hall pass.
8. Wait for the bell to ring before you leave class.

### **Seatwork rules**

1. The students may NOT copy from classmates
2. The students are allowed to help each other verbally.
3. The students are NOT allowed to do the work, partially or entirely, for other students. Specifically, they are not allowed to touch the keyboard and mouse of other students' computers.

### **Discipline:**

1. Verbal warning, second reminder (if needed)
2. Write-Up and then referral to the Discipline Office.
3. Parent-Teacher conference.

## **SUBJECT: ICT**

### **1st QUARTER – TENTATIVE COURSE CONTENT**

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
<b>Week / Date</b>	<b>Topic / Projects / Assessments</b>
<b>Week 1</b> <b>Aug 14<sup>th</sup> to 18<sup>th</sup></b>	Dealing with Word Processing Tools
<b>Week 2</b> <b>Aug 21<sup>st</sup> to 25<sup>th</sup></b>	MS Word Activity: Word Document
<b>Week 3</b> <b>Aug 22<sup>nd</sup> to 26<sup>th</sup></b>	MS Word Activity: Insert Pictures
<b>Week 4</b> <b>Aug 28<sup>th</sup> to Sept 1<sup>st</sup></b>	MS Word Activity: Text Box
<b>Week 5</b> <b>Sep 4<sup>th</sup> to 8<sup>th</sup></b>	MS Word Activity: Tables/ Chart
<b>Week 6</b> <b>Sep 11<sup>th</sup> to 15<sup>th</sup></b>	Basic Keyboarding / Typing Skills
<b>Week 7</b> <b>Sep 18<sup>th</sup> to 22<sup>nd</sup></b>	Quarterly Exams

## **2<sup>nd</sup> QUARTER – TENTATIVE COURSE CONTENT**

*(NB: Depending on time and interest, the teacher may delete and/or add other selections.)*

<b>Week / Date</b>	<b>Topic / Projects / Assessments</b>
<b>Week 1 (10)</b> Oct 11 <sup>th</sup> to 13 <sup>th</sup>	A Brief History of Publishing
<b>Week 2 (11)</b> Oct 16 <sup>th</sup> to 20 <sup>th</sup>	Steps of Publishing Process
<b>Week 3 (12)</b> Oct 23 <sup>rd</sup> to Oct 27 <sup>th</sup>	Introduction to Microsoft Publisher
<b>Week 4 (13)</b> Oct 30 <sup>th</sup> to Nov 3 <sup>rd</sup>	Ways to Create a Publication
<b>Week 5 (14)</b> Nov 6 <sup>th</sup> to 10 <sup>th</sup>	Using the Publisher Guides
<b>Week 6 (15)</b> Nov 13 <sup>th</sup> to 17 <sup>th</sup>	Inserting Text Boxes
<b>Week 7 (16)</b> Nov 20 <sup>th</sup> to 24 <sup>th</sup>	Adding Graphics, WordArt, and AutoShapes
<b>Week 8 (17)</b> Nov 27 <sup>th</sup> to Dec 1 <sup>st</sup>	Adding Tables
<b>Week 9 (18)</b> Dec 4 <sup>th</sup> to 8 <sup>th</sup>	Quarterly Exams
<b>Dec 16<sup>th</sup> to Jan 2<sup>nd</sup></b>	<b>Christmas Break</b>

### **3rd QUARTER – TENTATIVE COURSE CONTENT**

*(NB: Depending on time and interest, the teacher may delete and/or add other selections.)*

<b>Week / Date</b>	<b>Topic / Projects / Assessments</b>
<b>Week 1 (20)</b> <b>Jan 3<sup>rd</sup> to 5<sup>th</sup></b>	Introduction to MS PowerPoint
<b>Week 2 (21)</b> <b>Jan 8<sup>th</sup> to 12<sup>th</sup></b>	Text Basics and Applying Themes
<b>Week 3 (22)</b> <b>Jan 16<sup>th</sup> to 19<sup>th</sup></b>	Insert and Format Pictures/ Applying Transition
<b>Week 4 (23)</b> <b>Jan 22<sup>nd</sup> to 26<sup>th</sup></b>	Inserting Audio in PowerPoint
<b>Week 5 (24)</b> <b>Jan 29<sup>th</sup> to Feb 2<sup>nd</sup></b>	Inserting Video in PowerPoint
<b>Week 6 (25)</b> <b>Feb 5<sup>th</sup> to 7<sup>th</sup></b>	Inserting Table and Chart in PowerPoint Presentation
<b>Feb 8<sup>th</sup> to 16<sup>th</sup></b>	Chinese New Year
<b>Week 7 (26)</b> <b>Feb 19<sup>th</sup> to Feb 23<sup>rd</sup></b>	Creating a Sample PowerPoint Presentation
<b>Week 8</b> <b>Feb 27<sup>th</sup> to Mar 1<sup>st</sup></b>	Quarterly Exam

## FOURTH QUARTER

The Robotics curriculum opens the exciting world of computer science and robotics to lower school students in a fun and practical way. The lessons are constructed from hundreds of hours of actual lower school classroom experience. The learning activities are created from fun robotic projects which are designed to be inspiring and engaging, helping students see computing and technology as an important part of their world. The activities are designed with a focus on problem-based learning, creativity, exploration, critical thinking and problem-solving. Learn computer programming concepts and develop Scratch coding skills. Study the basic elements of algorithms such as sequence, decision, and iteration. Learn about using pseudocode, flowcharts and block diagrams. Develop programs with variables, loops, conditional instructions, and functions. Learn how to assemble mBot and understand basic robot system components. Use the scientific method to perform characterization studies of mBot sensor operation. Learn about robotic command and control programs by designing a state machine. Design an integrated, multi-input/output, robotic control program using the mBot RGB LEDs, Piezo Buzzer, Motors (Forward, Right Turn, Left Turn, Backwards), Ultrasonic Sensor, Line Follower Sensor, Light Detector Sensor. Explore the Software Development Life Cycle and learn about brainstorming, project planning and the importance of reuse in technology development. Teaching materials for the course come from textbooks, classroom lectures, newspapers, journals, medical newsletters, videos, and the internet.

### REFERENCE:

□ mBot Discovery: Learn & Teach Robotics In 12 Fun Lessons, 2018 by David Romano

### REFERENCE/LINKS:

□ [https://www.amazon.com/mBot-Discovery-Learn-Robotics-Lessons/dp/0692139435/ref=sr\\_1\\_fkmr0\\_1?keywords=mBot+discovery+LEVEL+1&qid=1566007201&s=gateway&sr=8-1-fkmr0](https://www.amazon.com/mBot-Discovery-Learn-Robotics-Lessons/dp/0692139435/ref=sr_1_fkmr0_1?keywords=mBot+discovery+LEVEL+1&qid=1566007201&s=gateway&sr=8-1-fkmr0)

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## Course Goal

- The students will learn about using pseudocode, flowcharts and block diagrams.
- The students will develop programs with variables, loops, conditional instructions, and functions.
- The students will learn how to assemble mBot and understand basic robot system components.
- The students will use the scientific method to perform characterization studies of mBot sensor operation.
- The students will learn about robotic command and control programs by designing a state machine.
- The students will design an integrated, multi-input/output, robotic control program using the mBot RGB LEDs, Piezo Buzzer, Motors (Forward, Right Turn, Left Turn, Backwards), Ultrasonic Sensor, Line Follower Sensor, Light Detector Sensor.
- The students will explore the Software Development Life Cycle and learn about brainstorming, project planning and the importance of reuse in technology development.

## **4th QUARTER – TENTATIVE COURSE CONTENT**

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
<b>Week / Date</b>	<b>Topic / Projects / Assessments</b>
<b>Week 1 (29) Mar 13<sup>th</sup> to 15<sup>th</sup></b>	Introduction to Robotics/ MBot Assembly
<b>Week 2 (30) Mar 18<sup>th</sup> to 22<sup>nd</sup></b>	Introduction to Make Block Coding Program
<b>Mar 23<sup>rd</sup> to Apr 7<sup>th</sup></b>	Easter Break
<b>Week 3 (31) Apr 8<sup>th</sup> – 12<sup>th</sup></b>	Make Block: Stop and Go
<b>Week 4 (32) Apr 15<sup>th</sup> to 19<sup>th</sup></b>	Make Block: Movement
<b>Week 5 (33) Apr 22<sup>nd</sup> to 26<sup>th</sup></b>	Make Block: Play Music
<b>Week 6 (34) Apr 29<sup>th</sup> to May 3<sup>rd</sup></b>	Make Block: Move In Circle
<b>Week 7 (35) May 6<sup>th</sup> to 10<sup>th</sup></b>	Quarterly Exams