

Dominican International School



Basic Computer Education I

Grade Level: G5
1 Year, 1 Credit

Teacher: Mr. Mervin D. Villaroya
Email: mvillaroya@dishs.tp.edu.tw

SY: 2023-2024

Course Description:

Computer Education II 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 Excel. 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. Excel Quick Thompson South- Western 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 5

REFERENCE/LINKS: [en.wikipedia.org/wiki/Word Processing](https://en.wikipedia.org/wiki/Word_Processing), and en.wikipedia.org/wiki/slide_show
<https://www.quora.com/what-are-the-features-of-MS-Word>
<https://www.quora.com/unanswered/whats-good-in-MS-Word?encoded-access=>
[https://en.m.wikipedia.org/wiki/Microsoft Excel](https://en.m.wikipedia.org/wiki/Microsoft_Excel)
<https://www.greycampus.com/opencampus/ms-excel/what-is-ms-excel>
<http://officeskills.org/microsoft-office-tutorials.html>
<https://midnightmusic.com/2020/01/8-creative-canva-projects-you-can-do-with-your-students-in-the-classroom/>
<https://www.makeuseof.com/best-canva-projects-for-kids/>
<https://d31kydh6n6r5j5.cloudfront.net/uploads/sites/158/2020/06/Canva-Userguide.pdf>
<https://edu.gcfglobal.org/en/excel2016/>

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 different software such as MS Word, MS Excel, 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 Excel
- The students will learn how to edit and format texts, documents, and spreadsheets
- The students will learn how to use different functions in MS Word 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 Excel
- The students will learn how to layout pages, slides and spreadsheet
- The students will learn how to create simple tables in a spreadsheet
- 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 how create simple graphic design that can be published anytime and anywhere
- 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.

Grading Criteria:

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

- ✓ **Class participation and Seatwork** - 3/10 of quarterly grade
- ✓ **Major Projects, Quizzes, and Tests**- 3/10 of quarterly grade
- ✓ **Quarterly Exams**- 3/10 of quarterly grade
- ✓ **Department** - 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>	
Week / Date	Topic / Projects / Assessments
Week 1 Aug 14th to 18th	Refresh Word Processing Skills Using Microsoft Word
Week 2 Aug 21st to 25th	MS Word Activity: Creating & Saving a Document
Week 3 Aug 22nd to 26th	MS Word Activity: Tables
Week 4 Aug 28th to Sept 1st	MS Word Activity: Text Format
Week 5 Sep 4th to 8th	MS Word Activity: Text Boxes
Week 6 Sep 11th to 15th	MS Word Activity: Pictures and Shapes
Week 7 Sep 18th to 22nd	Quarterly Exams

2nd QUARTER – TENTATIVE COURSE CONTENT

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

Week / Date	Topic / Projects / Assessments
Week 1 (10) Oct 11th to 13th	Introduction to Canva
Week 2 (11) Oct 16th to 20th	Canva Activity: Get to Know Me
Week 3 (12) Oct 23rd to Oct 27th	Canva Activity: Event Poster
Week 4 (13) Oct 30th to Nov 3rd	Canva Activity: Logo
Week 5 (14) Nov 6th to 10th	Canva Activity: Make a Diagram
Week 6 (15) Nov 13th to 17th	Canva Activity: Planner
Week 7 (16) Nov 20th to 24th	Canva Activity: Make a Cover
Week 8 (17) Nov 27th to Dec 1st	Canva Task: Infographic
Week 9 (18) Dec 4th to 8th	Quarterly Exams
Dec 16th to Jan 2nd	Christmas Break

3rd QUARTER – TENTATIVE COURSE CONTENT

<i>(NB: Depending on time and interest, the teacher may delete and/or add other selections.)</i>	
Week / Date	Topic / Projects / Assessments
Week 1 (20) Jan 3rd to 5th	Getting Started with Excel
Week 2 (21) Jan 8th to 12th	Cell Basics
Week 3 (22) Jan 16th to 19th	Formatting Cells
Week 4 (23) Jan 22nd to 26th	Intro to Formulas
Week 5 (24) Jan 29th to Feb 2nd	Functions
Week 6 (25) Feb 5th to 7th	Table
Feb 8th to 16th	Chinese New Year
Week 7 (26) Feb 19th to Feb 23rd	Charts
Week 8 Feb 26th to Mar 1st	Quarterly Exams

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

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

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>	
Week / Date	Topic / Projects / Assessments
Week 1 (29) Mar 13th to 15th	Reintroduction to Make Block Coding Program
Week 2 (30) Mar 18th to 22nd	Make Block: Move-in Square
Mar 23rd to Apr 7th	Easter Break
Week 3 (31) Apr 8th – 12th	Make Block: Alternate Blink with Music
Week 4 (32) Apr 15th to 19th	Make Block: Avoid Barrier
Week 5 (33) Apr 22nd to 26th	Make Block: Changing Lights
Week 6 (34) Apr 29th to May 3rd	Quarterly Exams