Dominican International School

Basic Computer Education I

Grade Level: G5   Teacher: Mr. Mervin D. Villaroya
1 Year, 1 Credit   Email: mvillaroya@dishs.tp.edu.tw

SY: 2024-2025

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 by Phoenix Publishing House Inc. Excel Quick Thompson South- Western Exploring ICT by Computer Assisted Learning Corporation Office Applications with Basic PC Troubleshooting by Computer Assisted Learning Corporation D-Whiz in ICT, Productivity and Entrepreneurial Skills Development 5

REFERENCE/LINKS:
https://en.wikipedia.org/wiki/Word_processor
https://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://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
- ✓ **Deportment** - 1/10 of quarterly grade

Student Materials Required:

- For the purpose of evaluating and turning in their work, students will need to check their Google Classrooms on a frequent basis.

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.
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/Activity 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

(NB: Depending on time and interest, the teacher may delete and/or add other selections.)	
Week / Date	**Topic / Projects / Assessments**
Week 1 Aug 12th to 16th	Refresh Word Processing Skills Using Microsoft Word
Week 2 Aug 19th to 23rd	**MS Word Activity:** Creating & Saving a Document
Week 3 Aug 26th to 30th	**MS Word Activity:** Tables
Week 4 Sep 28th to Sep 1st	**MS Word Activity:** Text Format
Week 5 Sep 2nd to Sep 6th	**MS Word Activity:** Text Boxes
Week 6 Sep 9th to 13th	**MS Word Activity:** Pictures and Shapes
Week 7 Sep 23rd to Sep 27th	Quarterly Exams
	MS Word Project: Class Book of Friends

2nd QUARTER – TENTATIVE COURSE CONTENT

Week / Date	Topic / Projects / Assessments
(NB: Depending on time and interest, the teacher may delete and/or add other selections.)	
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:** Make a Schedule
Week 5 (14) Nov 6th to 10th	**Canva Activity:** Logo
Week 6 (15) Nov 13th to 17th	**Canva Activity:** Comic Strip
Week 7 (16) Nov 20th to 24th	**Canva Activity:** Craft a GIF
Week 8 (17) Nov 27th to Dec 1st	**Canva Task:** Make a Photobook
Week 9 (18) Dec 4th to 8th	Quarterly Exams
Dec 16th to Jan 6th	**Christmas Break**

3rd QUARTER – TENTATIVE COURSE CONTENT

Week / Date	Topic / Projects / Assessments
(NB: Depending on time and interest, the teacher may delete and/or add other selections.)	
Week 1 (20) **Jan 7th to Jan 10th**	Getting Started with Excel
Week 2 (21) **Jan 13th to Jan 17th**	**MS Excel Activity:** Cell Basics
Week 4 (22) **Jan 27th to Jan 31st**	Chinese New Year
Week 5 (23) **Feb 3rd to Feb 7th**	**MS Excel Activity:** Formatting Cells
Week 5 (24) **Feb 10th to Feb 14th**	**MS Excel Activity:** Intro to Formulas
Week 6 (25) **Feb 17th to 21th**	**MS Excel Activity:** Functions
Week 7 (26) **Feb 24th to Feb 28th**	**MS Excel Activity:** Table/Charts
Week 8 **Feb 27th to Mar 1st**	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

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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

Week / Date	Topic / Projects / Assessments
(NB: Depending on time and interest, the teacher may delete and/or add other selections.)	
Week 1 (29) **Mar 18th to Mar 21st**	Reintroduction to Make Block Coding Program
Week 2 (30) **Mar 24th to Mar 28th**	**Make Block:** Move-in Circle
Week 3 (31) **Mar 31th to Apr 3rd**	**Make Block:** Alternate Blink
Week 4 (32) **Apr 7th to Apr 11th**	**Make Block:** Stop Automatically In Front of A Barrier
Apr 14th – Apr 18th	Easter Break
Week 4 (33) **Apr 21st to Apr 25th**	**Make Block:** Using the Light Sensor
Week 5 (34) **Apr 28th to May 2nd**	Quarterly Exams