

Dominican International School



Basic Computer Education I

Grade Level: G4
1 Year, 1 Credit

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SY: 2024-2025

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 by Phoenix Publishing House Inc. 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 4

REFERENCE/LINKS:

https://en.wikipedia.org/wiki/Desktop_publishing

https://en.wikipedia.org/wiki/Word_processor

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_Publisher

<https://www.technopedia/definition/13140/microsoft-publisher>

<http://officeskills.org/microsoft-office-tutorials.html>

<https://edu.gcfglobal.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
- ✓ **Department** - 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

<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 12th to 16th	Dealing with Word Processing Tools
Week 2 Aug 19th to 23rd	MS Word Activity: Word Document
Week 3 Aug 26th to 30th	MS Word Activity: Insert Pictures
Week 4 Sep 28th to Sep 1st	MS Word Activity: Text Box
Week 5 Sep 2nd to Sep 6th	MS Word Activity: Tables/ Chart
Week 6 Sep 9th to 13th	Basic Keyboarding / Typing Skills
Week 7 Sep 23rd to Sep 27th	Quarterly Exams

2nd 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 (10) Oct 11 th to 13 th	A Brief History of Publishing
Week 2 (11) Oct 16 th to 20 th	Steps of Publishing Process
Week 3 (12) Oct 23 rd to Oct 27 th	Introduction to Microsoft Publisher
Week 4 (13) Oct 30 th to Nov 3 rd	Ways to Create a Publication
Week 5 (14) Nov 6 th to 10 th	Publisher Activity: Using the Publisher Guides
Week 6 (15) Nov 13 th to 17 th	Publisher Activity: Inserting Text Boxes
Week 7 (16) Nov 20 th to 24 th	Publisher Activity: Adding Graphics, WordArt, and AutoShapes
Week 8 (17) Nov 27 th to Dec 1 st	Publisher Activity: Adding Tables
Week 9 (18) Dec 4 th to 8 th	Quarterly Exams
Dec 16 th to Jan 6 th	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 7 th to Jan 10 th	Introduction to MS PowerPoint
Week 2 (21) Jan 13 th to Jan 17 th	PowerPoint Activity: Text Basics and Applying Themes
Week 4 (22) Jan 27 th to Jan 31 st	Chinese New Year
Week 5 (23) Feb 3 rd to Feb 7 th	PowerPoint Activity: Insert and Format Pictures/ Applying Transition
Week 5 (24) Feb 10 th to Feb 14 th	PowerPoint Activity: Inserting Audio in PowerPoint
Week 6 (25) Feb 17 th to 21 th	PowerPoint Activity: Inserting Video in PowerPoint
Week 7 (26) Feb 24 th to Feb 28 th	PowerPoint Activity: Inserting Table and Chart in PowerPoint Presentation

Week 8 Feb 27 th to Mar 1 st	Quarterly Exam
	PowerPoint Project: Creating a Sample PowerPoint Presentation

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, 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

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

Week / Date	Topic / Projects / Assessments
Week 1 (29) Mar 18 th to Mar 21 st	Introduction and Setting Up the MBot
Week 2 (30) Mar 24 th to Mar 28 th	Make Block Coding Program
Week 3 (31) Mar 31 th to Apr 3 rd	Make Block: Stop and Go
Week 4 (32) Apr 7 th to Apr 11 th	Make Block: Working with LED Display
Apr 14 th – Apr 18 th	Easter Break
Week 4 (33) Apr 21 st to Apr 25 th	Make Block: Play Music
Week 5 (34) Apr 28 th to May 2 nd	Make Block: Move In Square
Week 6 (35) May 5 th to May 9 th	Quarterly Exams