

## **Curriculum Overview**

### **Computers and Technology Grades 6-8**

#### **A. Introduction**

The Golden Door Charter School Computers and Technology Curriculum will develop student's basic skills in how to use a computer. Focus will be placed on identifying what a computer is, how to use the mouse and keyboard, parts of the computer, and proper care and respect for the computer and all its parts. An introduction to terminology and recognition of keys on the keyboard will also be included. Students will also use software in the computer lab that will assist them in other course content areas such as language Arts and Math. Students will develop skills in navigating the Internet and will use specific sites to reinforce their learning in other areas such as Math, Reading, Science and Social Studies. Students will also be taught about how to surf the web safely and respect for other people's property.

Computer classes will be conducted several times a week throughout the year depending on the marking period and each class will be about 45 minutes in length. All activities will correlate with New Jersey Core Content Curriculum Standards and will be reflected in the instructor's lesson plans.

**Upon completion of Grade 8 students will be able to:**

#### **B. Content Outline**

1. Identifying parts of the Computer (Input/Output)
2. Login to the Network
3. Navigating the Web
4. Using Favorites
5. Adding Favorites
6. Identify Hardware and Software
7. Care and Use of the Computer
8. Starting and Closing a program
9. Understand about Copyrights and protected works
10. Personal Information on the Web
11. Care and use of a printer
12. Care and use of Storage Media
13. Use Microsoft Word to create and edit basic documents.
14. Use Microsoft Excel to edit and create Spreadsheets including graphs
15. Create Multi-Media presentations using Microsoft PowerPoint
16. Understand Keyboarding Concepts including correct fingering and posture.
17. Research topics on the Internet related to cross curricular activities.
18. Internet Safety and Etiquette
19. Use appropriate technology vocabulary
20. Care and use of a scanner
21. Care and use of a digital camera
22. Modify pictures using appropriate image editing software.

23. Create shortcuts
24. Use Microsoft Publisher to create flyers, newsletters and banners.
25. Store and retrieve information on a network.
26. Understand an Acceptable Use Policy
27. Choose appropriate tools for online research
28. Understand Plagiarism and Copyrights.
29. Use Microsoft Access.

### C. Knowledge and/or Skills

Upon successful completion of the requirements for this course, the students will be able to demonstrate proficiency in the skills below.

1. **Identifying parts of the Computer** - Mouse, Keyboard, Monitor, CD-ROM, Floppy Drive, Floppy Disk, Headphones, Speaker, Scanner, Digital Camera, PC Camera, and Microphone.
2. **Login to the Network** - Use of Ctrl + Alt + Delete, use of User ID and Password.
3. **Navigating the Web** - Clicking on hyperlinks, scrolling web pages, typing in web addresses.
4. **Using Favorites** – Finding bookmarked websites under Favorites
5. **Adding Favorites** – Adding a website to their Favorites
6. **Hardware and Software** – Identifying the difference between hardware parts and software. Recognition of different operating systems. Understanding about the different types of computers (laptops, handheld, supercomputers).
7. **Care and Use of the Computer** – Proper care of the computer, basic maintenance, respect for school property, sharing with others.
8. **Starting and closing a program** – Identifying icons on the desktop. Clicking on the “X” to close a program. Using the Start Menu.
9. **Understanding about Copyrights and Protected works** – What is a copyright? How can you use copyrighted information in your projects? Using pictures from the Internet.
10. **Personal Information on the Web** - privacy on the web, what information should not be given out, when to have an adult in the room while on the computer.
11. **Care and use of a printer** – adding paper and replacing toner cartridges.
12. **Care and use of Storage Media** – How to handle a floppy disk or CD-ROM. How to properly care for storage media, including Do’s and Don’ts.
13. **Use Microsoft Word to create and edit basic documents** – Editing of basic documents including formatting text with fonts, colors and alignment. Cut Copy and Paste. Spell Checking. Inserting Clip Art and pictures from the web.
14. **Use Microsoft Excel to edit and create Spreadsheets** –Enter basic data, creating basic formulas, use of functions (Average and Sum). Using the copy command to copy formulas. Formatting Cells. Using data to create graphs.
15. **Create Multi-Media presentations using Microsoft PowerPoint** - Inserting textboxes and clip art. Formatting text. Using custom animation and slide transitions.

16. **Understand Keyboarding Concepts including correct fingering and posture** – Learning Home Row and Bump Keys. Correct posture and fingering techniques. Building speed.
17. **Research topics on the Internet related to cross curricular activities** – Using different search engines to locate information on the web. Use of kid friendly search engines. Using Boolean operators to narrow your search results. Using the Internet to complete Scavenger Hunts.
18. **Internet Safety and Etiquette** – what is private? How to surf the web safely.
19. **Use appropriate technology vocabulary** – vocabulary to include computer parts, internet (hyperlinks, world wide web, blog, AUP).
20. **Care and use of a scanner** – how to scan an image, how to save it to your computer.
21. **Care and use of a digital camera** – how to take digital pictures, how to upload them to your computer, using online photo albums.
22. **Modify pictures using appropriate image editing software** - How to modify digital pictures and clipart using Photoshop including cropping, resizing, retouching, and modifying layers.
23. **Create shortcuts** – how to create shortcuts to programs on the desktop.
24. **Use Microsoft Publisher to create flyers, newsletters and banners** – use textboxes, add clipart, modify layouts and color.
25. **Store and retrieve information on a network** – how to save your files on a network and how to retrieve it.
26. **Understand an Acceptable Use Policy** – What is an AUP?, why use an AUP, what is contained in AUP?, review of our school’s AUP.
27. **Choose appropriate tools for online research** – Using Internet search engines (Google, Yahoo, Askjr), using online encyclopedia, thesaurus and dictionary.
28. **Understand Plagiarism and Copyrights** – What is plagiarism? How to cite references, using digital media in your work, what is a copyright?
29. **Use Microsoft Access** – create databases and tables, define fields, input data, run queries and create reports.

D. **Time and Sequence** – Approximately 2 weeks is spent on each skill but many are continued to be used throughout the year.

E. **Instructional Activities** –

1. Teacher Demonstration.
2. Student hands on demonstration.
3. Explanation.
4. Lecture.
5. Cooperative Learning – reinforced with use of the Smart Board in class.
6. Drills and Practice.

F. **Resources and Materials:**

1. [www.google.com](http://www.google.com)

2. [www.funschool.com](http://www.funschool.com)
3. [www.yahoo.com](http://www.yahoo.com)
4. [www.learningplanet.com](http://www.learningplanet.com)
5. [www.funbrain.com](http://www.funbrain.com)
6. [www.factmonster.com](http://www.factmonster.com)
7. [www.computerlab.kids.new.net/](http://www.computerlab.kids.new.net/)
8. [www.brainpop.com](http://www.brainpop.com)
9. [www.quia.com](http://www.quia.com)
10. [www.anthonydellarosa.com](http://www.anthonydellarosa.com)
11. [www.reference.com](http://www.reference.com)
12. <http://www.m-w.com/>
13. <http://www.ipl.org/>
14. Type to Learn 3
15. Pearson Digital Learning - Success maker software
16. Microsoft Office textbook
17. Dell Computer with Keyboard, mouse and headphones
18. Smart board Interactive Whiteboard
19. Microsoft Office software (Word, Excel, PowerPoint)
20. Adobe Photoshop Elements software.

## G. Assessment:

### 1. Class Participation

- i) Cooperation and Participation in class.
- ii) Willingness to try in class
- iii) Completed homework

### 2. Skills

- i) Practice of New skill taught – completed assignments
- ii) Improvement in basic skills taught
- iii) Recognition of basic computer vocabulary
- iv) Online testing
- v) 8<sup>th</sup> Grade Technology Assessment Test

### 3. Grading Scales

Tests	50%
Projects	25%
Participation	25%

## H. Core Content Standards:

By the end of Grade 8, students will:

1. **Identifying parts of the Computer (Input/Output) – 8.1.A.2**
2. **Login to the Network – 8.1.A.2**
3. **Navigating the Web – 8.1.B.2**
4. **Using Favorites – 8.1.B.2**
5. **Adding Favorites – 8.1.B.2**
6. **Identify Hardware and Software - 8.1.A.2**

7. **Care and Use of the Computer** - 8.1.B.2
8. **Starting and Closing a program** - 8.1.A.9
9. **Understand about Copyrights and protected works** -8.1.B.2 8.1.B.4
10. **Personal Information on the Web** 8.1.B.2
11. **Care and use of a printer** - 8.1.A.2
12. **Care and use of Storage Media** - 8.1.A.2
13. **Use Microsoft Word to create and edit basic documents** - 8.1.A.4, 8.1.A.5, 8.1.A.2, 8.1.A.10
14. **Use Microsoft Excel to edit and create Spreadsheets with Graphs** - 8.1.A.4, 8.1.A.7, 8.1.A.10
15. **Create Multi-Media presentations using Microsoft PowerPoint** 8.1.A.4, 8.1.A.8, 8.1.A.10,
16. **Understand Keyboarding Concepts including correct fingering and posture** -8.1.A.3
17. **Research topics on the Internet related to cross curricular activities** - 8.1.B.6
18. **Internet Safety** - 8.1.B.4
19. **Use appropriate technology vocabulary** – 8.1A.1
20. **Care and use of a scanner** – 8.1A.3
21. **Care and use of a digital camera** - 8.1A.3
22. **Modify pictures using appropriate image editing software** – 8.1A.8
23. **Create shortcuts** – 8.1A.12
24. **Use Microsoft Publisher to create flyers, newsletters and banners** - 8.1A.8
25. **Store and retrieve information on a network** – 8.1A.10
26. **Understand an Acceptable Use Policy** – 8.1.B.2, 8.1.B.3, 8.1.B.4
27. **Choose appropriate tools for online research** – 8.1.B.6, 8.1.B.7
28. **Understand Plagiarism and Copyrights** – 8.1.B.1, 8.1.B.2, 8.1.B.4, 8.1.B.5
29. **Use Microsoft Access** – 8.1.A.9