

Computer Education

Course: Computer 6

Level: Grade 6

Prerequisite: None

Text: Software programs: *Microsoft Windows XP*; *Microsoft Word*; *Microsoft Publisher*; *Microsoft PowerPoint*; www.google.com; *Kai's Power Goo*; www.learn2type.com; *Adobe PhotoShop 5.5*; *Calendar Creator 6*; www.puzzlemaker.school.discovery.com

Course Description: Computer 6 is a course that advances students' use of standard software and helps them learn about features of the Internet and computer systems. The sixth-grade course also includes a review of district computer usage policies and Internet safety as well as Internet exercises, keyboarding exercises, use of the digital camera, and the modification of pictures in *Power Goo* and *PhotoShop*.

Requirements: Students are required to treat everyone in the room with respect at all times. In addition, students will participate in their own learning, complete all work to the best of their abilities, seek help when needed, and be willing to help or work with others in the class.

Evaluation/Grading Policy: Student work is usually evaluated, graded and reported on a daily basis. Each evaluation with a grade less than A includes a suggestion as to what needs to be done to improve the student's grade. When students have additional time in the class period, students with a project grade of A are given suggestions as to how to improve or add to their project. Students also are given the opportunity to revisit old assignments to improve their grades on previously assigned work. Near the end of each marking period, each student receives a printout of all grades up to that point with a chance to revisit old assignments. A grade is then assigned at the end of the marking period based on the average of all of the grades for that marking period.

Course Outline:

- *Microsoft Word* letter to Mr. Press
- *Microsoft Word* cartoon
- Internet word search puzzle
- *Microsoft Publisher* sign in color
- *Microsoft Publisher* business card design
- *Microsoft Publisher* stationery design
- *Kai's Power Goo* project
- Internet crossword puzzle
- *Calendar Creator* monthly calendar
- *Microsoft PowerPoint* favorite movies slide
- *Microsoft PowerPoint* magazine covers slide
- *Microsoft PowerPoint* objects slide
- *Microsoft PowerPoint* slide effects and transitions
- Add transparency to a picture in *PowerPoint*
- Design and print a birthday card from the internet
- Finger-spell your name; place letter images in *PowerPoint*
- Draw in *Corel Draw*
- Digital camera picture taking
- Adding digital pictures into documents
- Picture uploads to the Internet
- Internet search speed test
- Course evaluation

Computer Education

Course: Computer 7

Level: Grade 7

Prerequisite: None

Text: Software programs: *Microsoft Windows XP; Microsoft Word; Microsoft Publisher; Microsoft PowerPoint; www.google.com; Kai's Power Goo; Microsoft Paint, Microsoft Photo Editor; Inspiration 6.0; www.learn2type.com; Adobe PhotoShop 5.5; Corel PhotoPain; Calendar Creator 6; www.refdesk.co; www.puzzlemaker.school.discovery.com; Beth's Math Art; Easy CD Creator*

Course Description: Computer 7 is a course that continues to develop students' skills using standard software as well as Internet. The seventh-grade course includes a review of district computer usage policies, Internet safety. Also included are an introduction to *Microsoft Access*, use of a scanner, features of *Corel PhotoPaint* program, Internet exercises, keyboarding practice and a review of file types.

Requirements: Students are required to treat everyone in the room with respect at all times. In addition, students will participate in their own learning, complete all work to the best of their abilities, seek help when needed, and be willing to help or work with others in the class.

Evaluation/Grading Policy: Student work is usually evaluated, graded and reported on a daily basis. Each evaluation with a grade less than A includes a suggestion as to what needs to be done to improve the student's grade. When students have additional time in the class period, students with a project grade of A are given suggestions as to how to improve or add to their project. Students also are given the opportunity to revisit old assignments to improve their grades on previously assigned work. Near the end of each marking period, each student receives a printout of all grades up to that point with a chance to revisit old assignments. A grade is then assigned at the end of the marking period based on the average of all of the grades for that marking period.

Course Outline:

- *Paintbrush* drawing to *Photo Editor* (changes) to both in *ppt*
- *MS Word* stationery
- Internet to *Photo Editor* (changes) to both in *ppt*
- Internet to *PhotoShop* (changes) to both in *ppt*
- Designing a three-column *MS Word* newsletter
- Business cards with a photo and uses of a text box in *MS Word*
- Greeting card from inside *MS Word*
- Making a brochure in *MS Word* (one-sided)
- Full page sign in *MS Word* with a border
- Greeting card from inside *MS Word* with even borders
- Finding/organizing/labeling works from 10 artists (one-page)
- Song lyrics search; print out and name the site
- Inspiration: family tree
- Clip art from the Internet to *ppt*
- *Ms Word* table: jewel case
- Logic puzzles online
- News story from three sources on the net
- *PhotoShop* artwork
- *MS Word* table: producing graph paper
- BBHS Library Software: *OPAC* bookbag to *MS Word*
- *Corel PhotoPaint*: picture with seven variations labeled in *ppt*
- File types worksheet
- *PhotoPaint*: image sprayer tool into *ppt*
- Find site for 3D pix: document in *ppt*
- Find and cite 3D walk-thru tour of non-US historical international place
- Features of www.refdesk.com
- Internet scavenger hunt
- “My New Club” brochure in *MS Word*
- Instruments of the orchestra project by section and labeled pix in *ppt*
- Keyboarding practice 1 and 2
- *Beth's Math Art*: Fractals
- Freeware search online
- H:/ drive cleanup
- Saving/ backing up (burning) onto a CDR
- Technical computer terms and where to find definitions
- Internet search speed test (fast-searching techniques)
- Course evaluation

Computer Education

Course: Computer 8

Level: Grade 8

Prerequisite: None

Text: Software programs: *Microsoft Windows XP*; *Microsoft Word*; *Microsoft Publisher*; *Microsoft PowerPoint*; www.google.com; *Microsoft Paint*; *Microsoft Photo Editor*; www.learn2type.com; *Adobe PhotoShop 5.5*; *Corel PhotoPaint*; GIF Animator; *Microsoft Movie Maker*; *Kai's Power Goo*; *Beth's Math Art*; *Easy CD Creator*; www.puzzlemaker.school.discovery.com

Course Description: Computer 8 is a course that further advances students' use of standard software and helps them learn about features of the Internet and computer systems. The eighth-grade course starts with a review of school policies and then moves quickly into Internet research, features of *Adobe PhotoShop*, and work with *Microsoft Word*, *Microsoft Access*, *Microsoft Excel*, *Microsoft Movie Maker*, and *GIF Animator*. Project layout and moving of projects smoothly from one program to another is emphasized in this course.

Requirements: Students are required to treat everyone in the room with respect at all times. In addition, students will participate in their own learning, complete all work to the best of their abilities, seek help when needed, and be willing to help or work with others in the class.

Evaluation/Grading Policy: Student work is usually evaluated, graded and reported on a daily basis. Each evaluation with a grade less than A includes a suggestion as to what needs to be done to improve the student's grade. When students have additional time in the class period, students with a project grade of A are given suggestions as to how to improve or add to their project. Students also are given the opportunity to revisit old assignments to improve their grades on previously assigned work. Near the end of each marking period, each student receives a printout of all grades up to that point with a chance to revisit old assignments. A grade is then assigned at the end of the marking period based on the average of all of the grades for that marking period.

Course Outline:

- *PhotoShop* picture combo
- *PhotoShop* picture plus reflections
- *PowerPoint* presentation
- Graphing from a spreadsheet
- Clip art edit in *Kai's Power Goo*
- Paragraph using foreign language accents
- Two-sided brochure in *MS Word*
- Tutorials online
- *Trojan Man* drawing
- Car research project
- Printing on an envelope
- Name and address labels from data on an *Excel* spreadsheet
- Organizational chart in *MS Word* or *PowerPoint*
- Paper airplane *MS Word* and word art
- *Adobe Illustrator* graphing and labeling
- Comparing metasearch engines
- Four-page booklet onto one sheet
- *GIF Animator*: making animated GIFs
- *GIF Animator*: adding layers to animation
- *GIF Animator*: incorporating Corel *PhotoPaint* effects
- Downloading of animated GIFs: editing in *GIF Animator*
- Starting in *GIFWorks*
- Additional features of *GIFWorks*
- Identifying file types
- Importing videos to the PC
- Editing a video using *MovieMaker*
- Saving (burning) a video project onto a DVD
- Internet scavenger hunt
- *Excel* bowling spreadsheet 1 and 2
- *Excel* spreadsheet using info from the Internet
- Typing skills practice
- H:/ drive cleanup
- Saving/ backing up onto a CDR (burning)
- Course evaluation

Computer Education

Course: Web Page Design

Level: Grades 7 and 8

Prerequisite: None

Text: None

Course Description: Web Page Design has students working on designing web pages from the first week. Students learn to evaluate web sites, add text, add pictures, add links, develop themes, work with transparencies, edit GIFs, read HTML, use source code web sites, and design their own animations.

Requirements: Students are required to treat everyone in the room with respect at all times. In addition, students will participate in their own learning, complete all work to the best of their abilities, seek help when needed, and be willing to help or work with others in the class.

Evaluation/Grading Policy: Student work is usually evaluated, graded and reported on a daily basis. Each evaluation with a grade less than A includes a suggestion as to what needs to be done to improve the student's grade. When students have additional time in the class period, students with a project grade of A are given suggestions as to how to improve or add to their project. Students also are given the opportunity to revisit old assignments to improve their grades on previously assigned work. Near the end of each marking period, each student receives a printout of all grades up to that point with a chance to revisit old assignments. A grade is then assigned at the end of the marking period based on the average of all of the grades for that marking period.

Course Outline:

- Internet safety
- Consent form/parents' *Geocities* information letter
- Signing up for a *Geocities* account
- Evaluating web sites
- Backgrounds on LINKS.HTML
- Adding text with links in LINKS.HTML
- Adding & uploading pictures
- Adding "flamingtext" or other fancy text with links
- Using *Photo Editor* to transparify
- Designing a theme page
- Linking one page to another
- Continuing focus on theme page (or pages)
- Creating a crisp, short page with a simple background and border:
LINKS2.HTML

- Adding music to a web site
- Using Internet-based background sites: LINKS3.HTML
- File types, GIFs and animated GIFs: ANIMATED.HTML
- Using *GIFWorks* to edit animated GIFs
- Adding buttons to a web page
- Reading HTML (“View Source”)
- Adding scripts (*Dynamic Drive* handout)
- Finding other code sites on the Internet
- Useful homework helper links page
- Specific subject area links page
- Use of *GIF Animator*
- Adding layers to an animated GIF
- Adding effects from *Corel Photo Paint* to animated GIFs
- HTML tutorial
- Overlapping objects in *PageBuilder*
- Types of menu systems
- Adding a menu system to your page: MENU.HTML
- Course evaluation

Computer Education

Course: Adobe Photoshop

Level: Grades 7 and 8

Prerequisite: None

Text: *Adobe PhotoShop*

Course Description: *Adobe PhotoShop* is a very hands-on course that teaches students about the features and uses of this professional drawing program. Students work each day on projects that include changing textures, airbrushing, finding add-ons, using different tools, working in 3-D and editing photographs.

Requirements: Students are required to treat everyone in the room with respect at all times. In addition, students will participate in their own learning, complete all work to the best of their abilities, seek help when needed, and be willing to help or work with others in the class.

Evaluation/Grading Policy: Student work is usually evaluated, graded and reported on a daily basis. Each evaluation with a grade less than A includes a suggestion as to what needs to be done to improve the student's grade. When students have additional time in the class period, students with a project grade of A are given suggestions as to how to improve or add to their project. At this point, students also are given the opportunity to revisit old assignments to improve their grades on previously assigned work. Near the end of each marking period, each student receives a printout of all grades up to that point with a chance to revisit old assignments. A grade is then assigned at the end of the marking period based on the average of all of the grades for that marking period.

Course Outline:

- Course intro
- Intro to *PhotoShop*
- Changing textures
- Locating files & drives
- Airbrushing: practicing techniques
- Airbrushing *zebra.psd*
- Airbrushing: changing eye and hair colors
- Finding *PhotoShop* add-ons on line
- Using *PhotoShop* add-ons
- Drawing skills
- Using the gradient tool
- Using the lasso tool
- 3-D: adding a person to a 3d plane
- 3-D: adding a person to a 3d picture

- 3D: combining different people from different pictures in a 3d picture
- 3D: detail work
- 3D: moving a figure/person into a different costume or scene
- Features (uses) of the “Transform” tool
- Downloading this week's new Mars pictures and adding “Martians”
- Creating a fictitious street scene
- Editing a team picture
- Other people's work in *PhotoShop*
- 3D: shading a 3D picture
- Course evaluation

Computer Education

Course:	Advanced Applications of Microsoft Office
Level:	Grades 9-12
Prerequisite:	None
Text:	None. All notes are disseminated through handouts generated by the teacher.

Course Description and Overview: This course seeks to give students a good working knowledge of four of the programs in the Microsoft Office program suite: Word, Excel, PowerPoint and Access. Students will explore the various functions of each program and use the programs to create high quality documents, spreadsheets, presentations and databases. The modification and customization of the user environment in each of the covered programs will also be discussed.

Course Objectives: The creation of professional-grade files and documents is the primary objective of this course. To this end, students will develop a wide variety of objects using the four main Microsoft programs contained in the Microsoft Office suite. As students will be faced with new computer related challenges as they grow from student to adult, they will develop investigatory and problem-solving skills when faced with a variety of computer challenges.

Requirements: During the course of this class students will create projects that demonstrate mastery of skills for each of the programs studied. This means that students will design and produce Word documents, Excel spreadsheets, PowerPoint presentations and Access databases. In addition, there will be a cumulative project where some or all of the objects created by various programs will be coordinated and combined.

Writing Requirements: A major part of this course is the creation of professional-grade documents and presentations. Appropriate writing styles will be emphasized during the generation of these objects through computer-aided assistance as well as interaction and critique from both teacher and fellow students.

Evaluation/Grading Policy: The breakdown of evaluation is as follows:

Projects: These are a major piece of a student's grade each marking period. There will be several projects given for each program as well as an overall project using all of the programs that are studied.

- Quizzes: There will be several quizzes given during this course. Quizzes may or may not be announced. Any practical that is assigned will be counted as a quiz.
- Homework/assignments: Homework will be checked or collected every time that it is assigned. In-class assignments will be counted toward the homework grade.
- Class participation: In addition to paying attention and answering when called on, staying on task will be counted in the class participation grade.

Course Outline:

Introduction to Microsoft Office

- Overview of Office Suite
- Brief History of MS Office
- Review of Common Office Functions

Customizing Microsoft Word

- Modifying the Word Environment
- Enhancing Word Documents

Using Microsoft Excel

- Manipulation of Data in Excel
- Customizing the Excel Environment

Exploring Microsoft Access

- Understanding Databases
- Managing Data in Access
- Customizing the Access Environment

Developing PowerPoint Presentations

- Enhancing PowerPoint Presentations
- Customizing the PowerPoint Environment

Computer Education

Course:	Web-based Presentations and Communications
Level:	Grades 9-12
Prerequisite:	None
Text:	None. All notes are disseminated through handouts generated by the teacher.

Course Description and Overview: The Web-based Presentations and Communications course is designed to enhance a student's ability to communicate ideas both verbally and through the Internet.

Course Objectives: This course is designed to give students the skills needed to effectively present an idea or concept on the Internet. The design and creation of web pages and sites through FrontPage will help students gain the ability to relate a concept effectively through the medium of the Internet. Students will be able to customize visual components of a website using Adobe Photoshop and Macromedia Flash.

Requirements: A major objective of this course is the effective design and development of information on the Internet for which students will be creating and modifying a wide variety of web pages and web sites using FrontPage. To assist in developing the ability to create dynamic presentations, students will create and adjust images and pictures using Photoshop and Flash.

Writing Requirements: In creating web pages, students will need to organize their thoughts and ideas. Correct writing techniques will be emphasized during the development periods of these items. Grammar and spelling will be checked both electronically and manually.

Evaluation/Grading Policy: The breakdown of evaluation is as follows:

Projects: These are a major piece of a student's grade each marking period. There will be several projects given for each program studied as well as an overall project using all of the programs that are studied.

- **Quizzes:** There will be several quizzes given during this course. Quizzes may or may not be announced. Any practical that is assigned will be counted as a quiz.
- **Homework/assignments:** Homework will be checked or collected every time that it is assigned. In-class assignments will be counted toward the homework grade.
- **Class participation:** In addition to paying attention and answering when called on, staying on task will be counted in the class participation grade.

Course Outline:

Introduction to the Internet

- What is the Internet?
- How the Internet works
- The History of the Internet
- Networks and the Internet

Searching the Internet

- Understanding What a Search Engine is and How It Works
- Running a Basic Search
- Doing Advanced Searches

Internet Safety and Netiquette

- The Hazards of Giving Personal Information on the Internet
- Understanding and Preventing Identity Theft
- Secure vs. Unsecure Web Sites
- Using Good Netiquette

Creating Web Pages with FrontPage

- Exploring What Makes an Effective Web Page
- Introduction to FrontPage
- Preparing a Web Page for Publication on the Internet

Creating Animations and Altering Images

- Using Photoshop
- Using Flash

Computer Education

Course:	Programming Languages
Level:	Grades 9-12
Prerequisite:	None
Text:	None. All notes are disseminated through handouts generated by the teacher.

Course Description and Overview: The Programming Languages course introduces students to the world of computer programming. An overview of how computers work will be presented as the groundwork on which the study of program design is based. To give students a broad overview of the possibilities available in programming, four computer languages will be discussed: Visual Basic, C++ and JAVA. Some languages may be covered in more depth than others due to time available.

Course Objectives: Through the study of the inner workings of both computers and computer programs, students will gain a fuller understanding of the capabilities and limitations of computers. In working with a variety of computer languages, students will develop the logical thinking and problem solving skills needed to be an effective computer programmer.

Requirements: Since the majority of computer programs are developed to meet a specific need, students will assess the requirements of certain scenarios and, based on those requirements, will create a program to satisfy the necessities for said scenario. As students will be exposed to a variety of programming languages, students will determine the strengths and weaknesses of each language and will figure out which language would be appropriate for specific scenarios.

Writing Requirements: In writing a program, a logical flow from one idea to the next is essential. This flow is also important to the creation of any written composition and will aid in the construction and design of these documents. In researching and discovering the history and inner workings of computers and computer languages, students will create documents outlining and explaining what was found.

Evaluation/Grading Policy: The breakdown of evaluation is as follows:

- Projects: These are a major piece of a student's grade each marking period. There will be several projects given for each program studied as well as an overall project using all of the programs that are studied.
- Quizzes: There will be several quizzes given during this course. Quizzes may or may not be announced. Any practical that is assigned will be counted as a quiz.
- Homework/assignments: Homework will be checked or collected every time that it is assigned. In-class assignments will be counted toward the homework grade.
- Class participation: In addition to paying attention and answering when called on, staying on task will be counted in the class participation grade.

Course Outline:

Computer and Programming Basics

- History of Computing
- How Computers Process Information
- History and Types of Programming Languages
- Logical Thinking

Programming with Visual Basic

- Creating the User Interface
- Adding the Code
- Debugging your Program and Creating an Executable

Programming with C++

- Learning the Language of C++
- Creating and Debugging Your C++ Program

Programming with JAVA

- Understanding the basics of JAVA
- Creating JAVA Applets and Programs