

Introduction to Computers - Syllabus

I. General Information

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Length of Course:	1 Year
Prerequisite:	Basic keyboarding skills required

II. Summary

Introduction to Computers is a one-year course in which students will learn how to use computers and a variety of software packages. This course will cover the following computer applications: File Management (working with Windows), Microsoft Office Suite (MS Word, MS Excel, MS PowerPoint, MS Access), Internet Research, E-mail.

III. Objectives

1. Gain an understanding and appreciation for God, the Creator, who is orderly, precise and infinite.
2. Use the computer as a tool and be able to demonstrate its use in creating an electronic product.
3. Demonstrate knowledge of the main computer applications used in business and be able to choose the appropriate application for a given task.

IV. Methodology

The class is highly interactive and requires the input of all students on a regular basis. Students may participate in any way that best suits their style and ability. Students will work collaboratively with their peers, both informally and on more formally structured projects. The emphasis will be on preparing students to be self-sufficient learners as they move toward higher education.

V. Course Outline (*by Chapters*)

0 What You Should Know Before Begin This Course

Objective: Introduce basic skills, using illustrations to help you recognize and remember the hardware or software involved in each skill. Some of these skills are covered in greater detail in further units.

No.	Date	Theme	Time
0-1	Sep.05-Sep.11	Turning the Computer On and Off	80
0-2	Sep.12-Sep.18	Using the Keyboard	80
0-3	Sep.12-Sep.18	Using the Mouse	80
0-4	Sep.12-Sep.18	Using Your Browser and the World Wide Web	80
0-5	Sep.12-Sep.18	Getting Help With Your Browser	80

1 The Amazing Computer

Objective: Identify the parts of a computer system. Identify the two main categories of software. Name three examples of software from each category. List five types of computers.

No.	Date	Theme	Time
1-1	Sep.19-Sep.25	An Overview of the Computer System: The Parts of a Computer System. Looking Inside the Machine. Software: Bringing the Machine to Life.	80

1-2	Sep.19-Sep.25	The Shapes of Computers Today: Supercomputers. Mainframe Computers. Minicomputers. Workstations. Microcomputers or Personal Computers.	80
	Sep.19-Sep.25	Quiz: Chapter 1	

2 Interacting With Your Computer

Objective: Explain why you should master the use of input devices. List the most commonly used input devices. Describe the function of a standard keyboard and mouse. Identify four "alternative" input devices.

No.	Date	Theme	Time
2-1	Sep.26-Oct.02	Standard Methods of Input: The Keyboard. The Mouse. Variants of the Mouse.	80
2-2	Oct.10-Oct.16	Alternative Methods of Input: Devices for the Hand. Optical Input Devices. Audiovisual Input Devices.	80
	Oct.10-Oct.16	Quiz: Chapter 2	

3 Output Devices

Objective: Explain the role of output devices in computer use. Describe the basic function of standard computer monitor. Explain how digital sound systems function in a PC. List three popular printing devices and describe their function.

No.	Date	Theme	Time
3-1	Oct.17-Oct.23	Monitors and Sound Systems: Monitors. PC Projectors. Sound Systems.	80
3-2	Oct.24-Oct.30	Devices That Output Hard Copy: Overview of Printers. Dot Matrix Printers. Ink Jet Printers. Laser Printers. Snapshot Printers. Other High-Quality Printers.	80
	Oct.24-Oct.30	Quiz: Chapter 3	

4 Processing Data

Objective: Explain the difference between data and information. List the three primary text code systems. Describe one way to provide a device with access to the system's processor. Identify the four primary manufacturers of PC processors. Differentiate between RISC and CISC processors. Define the term *parallel processing* and describe how it makes computers faster.

No.	Date	Theme	Time
4-1	Oct.31-Nov.06	Transforming Data Into Information: How Computers Represent Data. How a Computer Processes Data. Factors Affecting Processing Speed. Extending the Processor's Power	80
4-2	Nov.07-Nov.13	CPUs Used in Personal Computers: Intel Processors. Advanced Micro Devices (AMD). Cyrix Processors. Motorola Processors. RISC Processors. Parallel Processing.	80
	Nov.07-Nov.13	Quiz: Chapter 4	

5 Storing Information in a Computer

Objective: Identify the two main categories of storage technology. Explain how storage devices record and retrieve data. Explain how a computer locates data stored on magnetic media. List three criteria for measuring the performance of storage devices. Name four types of common disk drive interfaces.

No.	Date	Theme	Time
5-1	Nov.14-Nov.20	Types of Storage Devices: Categorizing Storage Devices. Magnetic Storage Devices. Optical Storage Devices.	80
5-2	Nov.21-Nov.27	Measuring Drive Performance: Average Access Time. File Compression. Data Transfer Rate. Data Transfer Rate. Drive-Interface Standards.	80
	Nov.21-Nov.27	Quiz: Chapter 5	

6 The Operating System and User Interface

Objective: Define the terms *multitasking* and explain its benefits for the user. List four types of utility software. Identify six commonly used PC operating systems.

No.	Date	Theme	Time
6-1	Nov28-Dec.04	Operating Systems Basics: The User Interface. Running Programs. Managing Files. Managing Hardware. Utility Software.	80
6-2	Nov28-Dec.04	PC Operating Systems: UNIX. DOS. The Macintosh Operating System. Windows 3x. OS/2 Warp. Windows NT. Windows 95 and 98. Linux. Windows 2000.	80
	Nov28-Dec.04	Quiz: Chapter 6	

7 Productivity Software, Part I

Objective: Name three popular word processing and spreadsheet programs. Discuss the basic uses of word processing and spreadsheets programs. Identify five common interface components found in windowed productivity applications. Define the terms *editing* and *formatting*.

No.	Date	Theme	Time
7-1	Dec.05-Dec.11 Dec.12-Dec.18 Dec.19-Dec.25	Word Processing and Desktop Publishing Software: Word Processing Programs and Their Uses. The Word Processor's Interface. Entering and Editing Text. Formatting Text. Special Features of Word	270
7-2	Jan.02-Jan.08 Jan.09-Jan.15 Jan.30-Feb.05 Feb.06-Feb.12	Spreadsheet Software: Spreadsheet Programs and Their Uses. The Spreadsheet's Interface. Entering Data in a Worksheet. Editing and Formatting a Worksheet. Adding Charts. Analyzing Data in a Spreadsheet.	360
	Feb.06-Feb.12	Quiz: Chapter 7	

8 Productivity Software, Part II

Objective: Describe the basic purpose of presentation programs. Explain the basic steps involved in creating slides. Distinguish between a database and a database management system. Identify five types of database structures. Explain the basic steps involved in creating a database. Define the term *enterprise software* and describe one way such software is used.

No.	Date	Theme	Time
8-1	Feb.13-Feb.19 Feb.20-Feb.26 Feb.27-Mar.05 Mar.06-Mar.12	Presentation Programs: Presentation Program Basics. Integrating Multiple Data Resources. Presenting Slide Shows.	360
8-2	Mar.13-Mar.19 Mar.20-Mar.26 Apr.03- Apr.09 Apr.10- Apr.16 Apr.17- Apr.23	Database Management Systems and Enterprise Software: Databases and Database. Working With a Database. Enterprise Software.	450
	Apr.17- Apr.23	Quiz: Chapter 8	

9 The Internet and Online Resources

Objective: List two reasons for the Internet's creation. Describe the parts of an Internet address. Name five major features of the Internet. List two ways in which a PC can access the Internet.

No.	Date	Theme	Time
9-1	Apr.24- Apr.30 May.01-May.07 May.08- May.14	Internet Basics: The Internet: Then and Now. How the Internet Works. Major Features of the Internet. Online Services. Internet-Related Features in Application.	270
9-2	May.15- May.21 May.22- May.28 May.29-Jun.04	Getting Online, Working Online: Accessing the Internet. Connecting a PC to the Internet. Working on the Internet. Commerce on the World Wide Web.	270
	May.29-Jun.04	Quiz: Chapter 9	

VI. Evaluation

N°	Items	Pondered
1.	Homework	20.00 %
2.	Class work	30.00 %
3.	Quizzes	20.00 %
4.	Tests	30.00 %
Total:		100.00 %

93 – 100 = A	69 – 72 = C-
89 – 92 = A-	66 – 68 = D+
86 – 88 = B+	63 – 65 = D
83 – 85 = B	Below 63 = F
79 – 82 = B-	
76 – 78 = C+	
73 – 75 = C	

Enabling Activities Required

1. Regular class attendance
2. Satisfactory completion of one guided group work project at the end of each semester.
3. Satisfactory completion of the quizzes and Final Exam

VII. Class Rules

1. Bring your computer textbook, notebook, disks, pens, and pencils every class
2. Be attentive while the teacher or a student who is called upon is talking.
3. Bring no food, drink, candy, gum, hats or sunglasses to the class.
4. Handle all equipment properly.
5. Verbal abuse is not tolerated.
6. Familiarize with all school policies in the Greater New York Academy Bulletin and follow them.

General Procedure for Infractions

First offence	Verbal warning
Second offence	Documentation in teacher's record and action - Detention and phone call to parents
Third offence	Conference with Parents and Principal
Fourth offence	Principal's office - recommendation for suspension

- **Heading:** A heading must be at the top of all assignments or papers presented. They must have first and last name, the date due, the class period, page of the assignment and the subject. Failure to have any of the above would result in your assignment not being accepted.
- **Assignments:** These are given daily and are due on the appointed date. Late assignments follow rules outlined in school bulletin.
- **Unit Tests:** These are given at the end of each unit. There will be seven unit tests during each semester. Students who miss a test must have a written excuse from a parent, guardian, or physician explaining the reason(s) for missing the test. This note must be handed in at the next class session. Failure to do so would result in the student receiving a zero for the test they missed

VII. Bibliography

1. *Textbook:* Norton Peter. Peter Norton's Introduction to Computers Fourth Edition. Ohio: Glencoe/McGraw-Hill. ISBN 0-07-821058-5 © 2001
2. New Perspectives on Computer Concepts- Essentials 5th Edition ISBN: 0-619-16164-7 © 2003
3. New Perspectives on Microsoft Windows 2000 - Introductory ISBN: 0-7600-7093-8 © 2000
4. New Perspectives on Microsoft PowerPoint 2002 - Brief ISBN: 0-619-04400-4 © 2002
5. New Perspectives on Microsoft Access 2002 - Brief ISBN: 0-619-02087-3 © 2002
6. New Perspectives on Microsoft Excel 2002 - Brief ISBN: 0-619-02080-3 © 2002
7. New Perspectives on Microsoft Word 2002 - Brief ISBN: 0-619-02093-8 © 2002

