



**Department of Physics**

**College of Education**

**Salahaddin University-Erbil**

**Subject: Computer Skills**

**Course Book – 1<sup>st</sup> Year**

**Lecturer's name: Kadhim Q. Jabbar,**

**Khadija N. Abdulla, Ramadhan A. Mohammed**

**Academic Year: 2023- 2024**

# Course Book

<b>1. Course name</b>	<b>Computer Skills</b>
<b>2. Lecturer in charge</b>	<b>Kadhim Q. Jabbar</b>
<b>3. Department/ College</b>	<b>Physics / Education</b>
<b>4. Contact</b>	<b>e-mail: Kadhim.jabbar@su.edu.krd Tel: (optional)</b>
<b>5. Time (in hours) per week</b>	<b>Theory: 1 Practical: 2x3 hrs. (6 hours/week)</b>
<b>6. Office hours</b>	<b>Monday from 8:30 Am to 11:30 Am.</b>
<b>7. Course code</b>	
<b>8. Teacher's academic profile</b>	<b>Undergraduate study between 2003 and 2007. Physics assistant 2007-2009 MSc. Study 2009-2012 PhD. Study 2020 – Cont. Teaching: Practical physics :(Electricity lab. + Atomic lab. + Optics lab. + Advanced electricity and Magnetism lab. General physics lab. + IT Lab. + MATLAB Lab. Theory: Information Technology, Mechanics and Properties of Matter, General Physics and MATLAB.</b>
<b>9. Keywords</b>	<b>Windows, Excel, Word, Power point, Physical Science Software.</b>
<b>10. Course overview:</b>	Computers and computerized devices have become an integral part of society. In fact, many people use them in <a href="#">schools</a> , homes, and the workplace. It has become imperative to know basic computer skills to survive in the world. In college, many students acquire basic computer skills that equip them with the knowledge to operate a computer, such as sending emails, conducting Internet research, creating word processing documents and creating presentations. Word processing programs offer a variety of features that may be useful to students, depending on the course. Students also learn other programs, such as PowerPoint, to create slides that will accompany oral presentations and speeches. Lecturers offer basic computer literacy for students to gain familiarity with hardware and software functionality. Students can also find tutorials with step-by-step instructions on learning computer basics. The days of textbook only research and handwritten submissions are over. With the advent of web-enhanced courses, student must possess basic computer skills in order to execute commands in basic computer applications. These basic computer skills help students excel in college and eventually carry over with them into the workforce. Exercising and advancing computer literacy skills can also lead to greater opportunities.
<b>11. Course objective:</b>	The course is intended as an introduction to computer skills. The formal objective of the course is to give exposure to the research areas of computer science and the core problems in the field; while preparing students for the knowledge needs of more future courses. We hope to achieve this goal by presenting higher level concepts in lecture and computer

practices in the lab. This exposure comes from learning the basics principles of computer sciences.

This course, using both lecture and laboratory practice to introduces students to basic computer concepts in hardware, software, networking, computer security to teach students techniques of searching information on the net.

### 12. Student's obligation

Attending at lectures and exercises.

**Home works**

**Quizzes**

**Team work projects**

**Exams**

### 13. Forms of teaching

To achieve the objectives of the course, the following methods and techniques will be followed during teaching process:

1. Lecture notes will be handled to the students at the beginning of each part to facilitate easier understanding of books and also to read references.
2. Power point presentation for parts of the course as required.
3. White board will be used to explain program commands, draw sketches and solve problems in the lab.
4. Computer labs for practicing the theoretical parts.

### 14. Assessment scheme

The student must provide the following quizzes and exams during the course:

Annual Effort (50 %)		Final Exam (50 %)		Total
Lab Practices*	Midterm Exam (Theoretical)	Practical	Theoretical	
<b>25%</b>	<b>25%</b>	<b>25%</b>	<b>25%</b>	<b>100%</b>

\* Quizzes and homework's are performed at the lab practices during the course.

### 15. Student learning outcome:

Students are expected at the end of the year will have the abilities to:

- Identify the hardware components of a personal computer system
- List major input and output devices
- Explain the functions of processing, memory, storage and communication devices
- Realize the significance of each hardware component in processing information
- Identify general trends in the development of the different hardware components of a computer
- General student knowledge (typing ability, excel, PowerPoint, data analysis, etc.)
- Introduction to internet, e-mails, etc.

<ul style="list-style-type: none"> <li>• Learning scientific software or computer programming depending on the department requirements.</li> <li>• Application of programs in computer laboratories.</li> </ul>	
<p><b>16. Course Reading List and References:</b> Students may use the lecture notes and the following references:</p> <ul style="list-style-type: none"> <li>• Joyce Cox and Joan Lambert “Microsoft PowerPoint 2013 Step by Step”</li> <li>• Curtis D. Frye “Microsoft Excel 2013 Step by Step”</li> <li>• Other computer text books, computer magazines and internet.</li> </ul>	
<b>17. The Topics:</b>	<b>Lecturer's name</b>
<p><b>Weeks 1 - 2</b></p> <ul style="list-style-type: none"> <li>•General introduction about computer skills</li> </ul> <p><b>Weeks 2-6</b></p> <ul style="list-style-type: none"> <li>•Microsoft office word, open the Microsoft office word, its windows component and their functions.</li> <li>•Practically studying words window components and their function&amp; standard toolbar. (Home ribbon)</li> <li>•Keyboard keys functions (enter, backspace, space bar, shift ...etc.) &amp;formatting bar. Text selection, keyboard shortcut.</li> <li>•Table and border toolbars item. (table options, Sorting)</li> <li>•Drawing toolbars item.</li> <li>•Apply the above practically.</li> </ul> <p><b>Weeks 7-8</b></p> <ul style="list-style-type: none"> <li>•Microsoft power point, open it, power point window components.</li> <li>•Open new slide, slide layout, how to type in slides.</li> <li>•Insert slides, new slide, slide number, diagram, and chart.</li> <li>•Design, select slide design, change design and custom effects.</li> <li>•Use insert list and make animation to your slide.</li> <li>•Apply the above practically.</li> </ul> <p><b>Weeks 9-10</b></p> <ul style="list-style-type: none"> <li>•Electronic Spreadsheets – concept, packages, creating, editing and saving a spreadsheet with MSEXCEL</li> <li>•Work with a spreadsheet (MSEXCEL) of in-built Statistical and other functions and writing expressions,</li> <li>•Creating Data Analysis option in Tools Menu, Chart wizard, functions (auto sum, average max, minimum, count and more functions)</li> <li>•Use of Data Analysis Tools – Correlation and Regression, t-test for two samples, Creating Graphs.</li> <li>•Apply the above practically.</li> </ul>	<p>Lecturer's name -----</p> <p>Date -----</p>

<p><b>18. Practical Topics (If there is any)</b></p>													
<p>Computer skills for first stage one hour theory and two hours practice per week, means each subject after theory the student will attend the computer lab for practice, also home works or team works they will do in home.</p>	<p>Lecturer's name: M.Kadhim Q. Jabbar 6 hrs per week  Date -----</p>												
<p><b>19. Examinations:</b></p> <p><b>1. Compositional:</b></p> <p>In this type of exam, the questions usually start with Explain how, what are the reasons for...? Why...? How....?</p> <p>Example</p> <p>Q\ What are the benefits of using online storage? Name four Internet services that provide online storage?</p> <p><b>Answer\</b> One of the biggest benefits of online storage is the ability to access data from anywhere. Online data storage also provides the ability to share files among different users. Examples: Sky drive Drop box Google drive I cloud</p> <p><b>2. True or false type of exams:</b></p> <p>In this type of exam, a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence.</p> <p>Example</p> <p>Q\ State whether the following statements are true or false:</p> <ol style="list-style-type: none"> <li>1. Texts, Pixels and Sounds are represented by Bits in computer memory.</li> <li>2. Secondary memory stores data temporary.</li> </ol> <p><b>Answer\</b> 1. True 2. False</p> <p><b>3. Multiple choices:</b></p> <p>In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase.</p> <p>Example:</p> <p>Q\ Choose the correct answer:</p> <ol style="list-style-type: none"> <li>1) One Megabyte equals to:             <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">A. 1000 Kbyte</td> <td style="width: 25%;"><b>B. 1024 Kbyte</b></td> <td style="width: 25%;">C. 1000 Kbit</td> <td style="width: 25%;">D. 1024 Kbit</td> </tr> </table> </li> <li>2) Software is stored on storage devices in a special container called.             <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">A. Icon</td> <td style="width: 25%;"><b>B. File</b></td> <td style="width: 25%;">C. DVD</td> <td style="width: 25%;">D. CD</td> </tr> </table> </li> <li>3) Which extension is used for PowerPoint presentations?             <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">A. doc</td> <td style="width: 25%;">B. dwg</td> <td style="width: 25%;">C. wav</td> <td style="width: 25%;"><b>D. ppt</b></td> </tr> </table> </li> </ol>		A. 1000 Kbyte	<b>B. 1024 Kbyte</b>	C. 1000 Kbit	D. 1024 Kbit	A. Icon	<b>B. File</b>	C. DVD	D. CD	A. doc	B. dwg	C. wav	<b>D. ppt</b>
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<p><b>20. Extra notes:</b></p> <ul style="list-style-type: none"> <li>• Mobile phones should be turned off during the lecture time.</li> </ul>													

- Students should come to the lecture on time, if you are late, ask for permission and come in quietly.
- Class attending without lecture notes is not allowed.
- Try not to leave the class without a good reason, if you need it, leave quietly after permission.
- The Final Exam will include all topics of the lectures.
- Students should come in the lab on time. Late students will not be admitted to the lab without an acceptable reason, and they will get a zero grade for the missing lab.
- Leaving the group and wandering is not allowed.
- Using memory devices (USB, CD, DVD ...) with the lab computers is not allowed.
- Students are responsible for any loss or damage of devices.
- Damage to devices must be reported immediately

## 21. Peer review