**Advanced Computer Skills**

**Second Year – First Semester**

**Asst. Lecturer Ahmed Salahalddin Muhammed**

**Academic Year: 2024-2025**

**Course Book**

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| **S. No.** | **Information** | **Details** |
|  | **Course Name** | Advanced Computer Skills |
|  | **Course Code** | IT201ACS |
|  | **Lecturer In-charge** | Ahmed Salahalddin Muhammed |
|  | **College/Department** | College of Engineering and Computer Science/ Department of Information Technology |
|  | **Contact Information** | Ahmed.salahaddin@lfu.edu.krd |
|  | **Time (in hours) per Week** | Theory: 2  Practical: 2 |
|  | **Office Hours** | 8:00 AM – 3:00 PM (will be fixed according to timetable) |
|  | **Teacher’s Academic Profile** | 1. 2021-2022: MSC in College of Engineering and Computer Science/ Department of Information Technology from Lebanese French University. 2. 2016-2017: BSC in information technology from Lebanese French University. |
|  | **Academic Title** | Assistant Lecturer |
|  | **Keywords** | MS Excel, Formatting, Sorting and Filtering, Excel Functions and Formulas, Data Validation, Charts and Graphs and smart art. |
|  | **Course Overview:**  As time passes, business workplaces change and advance with the use of ICT and computer-based applications. Hence, IT graduates need to become more skilled and experienced compared to the years before. There are many useful technological tools that make everyone’s work easier. This course is hence a very good opportunity and approach to make our IT students excel in using these technologies. In this course, after introducing some basic computer components and operating systems, many important features of MS Excel are covered. The lecturer and students, all together, will be going through each one of these features and using them in a joyful learning environment. | |

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| **12.** | **Aims & Objectives:**  The main aims and objectives of this course is to give the IT students some advanced computer skills and other useful information to use in their futures. These skills will undoubtedly help them to become knowledgeable and competent graduates in their fields of work, whether they choose to work in the IT industry or not. In this course, the basic components of computers are described. Then, going deeper, Microsoft Excel is introduced together with many of its important features, such as; formatting, excel functions and formulas, sorting and filtering, data entry, data validation, charts and graphs, pivot tables and pivot charts, and lastly, printing in MS excel. Having said these, this course will be a fun and enjoyable one, each topic will be more interesting than the one before it. |
| **13.** | **Course Requirements:**   * No prerequisite courses are required. * Students are required to attend all the lectures and undertake all the obligatory exams, tests, quizzes, reports, assignments, projects or any other assessments. * Absences will be dealt with according to the rules and regulations set by the Lebanese French University. |
| **14.** | **Teaching and Learning Methods:**  This course is designed to meet the modern teaching principles in order to achieve the best learning experience. During the course, many different innovative learning strategies are used with the help of ICT tools in order to deliver the topics with maximum student attention and mind activeness.  The teaching methods may include but not limited to:   * Quizzes, tests, in-class assignments, group/individual seminars, posters and reports. * flipped classroom, reflections and mind maps. |
| **15.** | **Assessment Scheme:**   * One Midterm Exam will be held on week 8, weighing 25% of the total mark. * Many assessments and assignments will be undertaken throughout the course, weighing 15% all together. * One Final Exam will be held on week 16, weighing 60% of the total mark. |
| **16.** | **Students Learning Outcome:**  By the end of this course the student should be able to learn:   * How to use excel in term of design of spread sheet? * How to crate table in advanced way? * Working and creating filtering, sorting, validation. * Learning about advanced formula. * They will be familiar with charts. * How to crate table inside excel sheet? * They will learn frizzing pan. * After all they will learn how to make all the working outcomes from printing lecture. |
| **17.** | **Course Reading List and References:**  Parts of the following books and other online resources will be used throughout the course   * Lambert, J. and Frye, C., 2015. Microsoft Office 2016 Step By Step. 1st ed. Microsoft Press. * Silberschatz, A., Galvin, P. and Gagne, G., 2018. Operating System Concepts. 10th ed. Hoboken (NJ): Wiley. |
| **18.** | **Course Content**  All the course contents are listed below according to their delivering weeks. |

**Course Content**

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| **Week** | **Lecture Date** | **No. of Hours** | **Topics** |
| 1. |  | 2 | Introduction to Microsoft Corporation & the basic operations in Excel. How to open work sheet and the moving and zooming inserting and deleting row & renaming sheet and moving and saving your work. |
| 2. |  | 2 | Changing column widths, formatting decimals, Selecting and renaming worksheets, Inserting and deleting sheets, Moving and copying a worksheet, selecting cells, Formatting cell contents, Adding borders, and Formatting numbers. |
| 3. |  | 2 | Number Formats, Wrapping Text in a Cell,  Merging Cells and Splitting Merged Cells, Format Painter, Insert Cells into a Worksheet, Deleting Cells from a Worksheet, Align , Indent Cell Contents, Changing Text Orientation |
| 4. |  | 2 | Formula, entering formula, how does excel work with mistyping, Relative cell referencing, Absolute cell referencing,  Order of operations, Standard error values. |

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| 5. |  | 2 | Conditional formatting |
| 6. |  | 2 | Sorting data |
| 7. |  | 2 | Filtering data |
| 8. | Midterm Examinations | | |
| 9. |  | 2 | Advanced formulas |
| 10. |  | 2 | Functions and Formulas |
| 11. |  | 2 | Functions and Formulas (Continued) |
| 12. |  | 2 | [Freezing Panes and View Options](https://edu.gcfglobal.org/en/excel2016/freezing-panes-and-view-options/1/) |
| 13. |  | 2 | Data Validation |
| 14. |  | 2 | Charts and Graphs |
| 15. |  | 2 | Pivot Tables, Pivot Charts and Printing |
| 16. | Final Examinations | | |

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| **19.** | **Examinations:**  Both the Midterm and Final exams are going to be composed of many question types, such as: Definition, Explanation, Reasoning, Differentiating, Illustration, Fill the blanks, etc.  **Class Participation:**  There will be many activities going on throughout the course period in order to ensure and guarantee the learning outcomes. Therefore, students are expected to pay full attention and participate in all classroom activities in order to maximize their learning and understanding. |
| **20.** | **Notes to Students:**   * Seek help from the lecturer or your classmates whenever you need to. * Time spent in learning is never wasted, however, make sure that you make it enjoyable. * Keep a personal notebook to write down your notes in the lectures. Don’t rely on your friend’s notes as each one of you is different and has different learning approaches. * Try to solve problems on your own after learning each new topic or excel function. |

**Happy Learning!**