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| D:\UAAR\UIIT\courseOutlineCommittee\CourseContents_Final_V02\New folder\logo4.png | **PMAS Arid Agriculture University Rawalpindi**  **University Institute of Information Technology** | | | | C:\Users\Shahid\Downloads\IMG-20210824-WA0001.jpg |
| CSC-100 Application of Information & Communication Technologies | | | | | | |
| **Credit Hours:** | | **3(2-3)** | **Prerequisites:** | **None** | | |
| **Teacher:** | |  |  |  | | |

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| **Course Description:** |
| This course is designed to provide students with an exploration of the practical applications of Information and Communication Technologies (ICT) and software tools in various domains. Students will gain hands-on experience with a range of software applications, learning how to leverage ICT to solve daily life problems, enhance productivity and innovate in different fields. Through individual and interactive exercises and discussions, students will develop proficiency in utilizing software for communication, creativity, and more. |
| **Course Objective:** |
| After successful completion of the course, the students will be able to: -   * Understand basic functions of computer hardware and software components including operating system functions * Identify various networks (LAN, WAN, intranet), topologies (ring, bus, star), protocols (TCP/IP, HTTP &DNS), media types and network hardware. * The importance of this course should motivate you all to take keen interest in the class proceedings and try to work hands on. * Design and create web pages using HTML * Understand the fundamentals of system analysis, life cycle of a program development. |
| **Teaching Methodology:** |
| Lectures, Written Assignments, Practical labs, Semester Project, Presentations |
| **Courses Assessment:** |
| Mid Exam, Home Assignments, Quizzes, Project, Presentations, Final Exam |
| **Reference Materials:** |
| * Introduction to computers, Peter Norton, 7thEdition * Computer Science An Overview, J. Glenn Brookshear 13th Edition. * Sinha, Pradeep K., and Priti Sinha. Computer fundamentals. BPB publications, 2010. * Livesley, Robert Kenneth. An introduction to automatic digital computers. Cambridge University Press, 2017 |

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| **Course Learning Outcomes (CLOs)** |  |  |
| At the end of the course the students will be able to: | **Domain** | **BT Level\*** |
| 1. Explain the fundamental concepts, components, and scope of Information and Communication Technologies (ICT). | C | 2 |
| 1. Identify uses of various ICT platforms and tools for different purposes. | C | 3 |
| 1. Apply ICT platforms and tools for different purposes to address basic needs in different domains of daily, academic, and professional life. | C | 3 |
| 1. Understand the ethical and legal considerations in use of ICT platforms and tools. |  | 4 |

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| **Week/Practical #** | | **Theory** |
| Week 1 | Practical-I | Basics of hardware |
| Practical-II | Software, ICT platforms, networks, local and cloud data storage etc.). |
| Practical-III | Scope of Information and Communication Technologies (use of ICT in education. business, governance, healthcare, digital media and entertainment, etc.). |
| Week 2 | Practical-I | Computer Inside |
| Practical-II | Intro to MS Office |
| Practical-III | MS office (cont..) |
| Week 3 | Practical-I | Intro to MS Word |
| Practical-II | Basic Formatting Features of MS Word |
| Practical-III | Basic Formatting Features of MS Word cont.. |
| Week 4 | Practical-I | Inserting images, table and symbols in MS Word |
| Practical-II | Setting margins, layouts and Table of Contents in MS Word |
| Practical-III | Google Workspace (Google Docs) |
| Week 5 | Practical-I | Dropbox (Cloud storage and file sharing), |
| Practical-II | Google Drive (Cloud storage with Google Docs integration) and Microsoft |
| Practical-III | OneDrive (Cloud storage with Microsoft Office integration). |
| Week 6 | Practical-I | Number conversions Introduction |
| Practical-II | Number conversions Introduction cont.. |
| Practical-III | Numbers conversion practice |
| Week 7 | Practical-I | Introduction to windows |
| Practical-II | Introduction to Unix |
| Practical-III | Introduction to Linux |
| Week 8 | Practical-I | Video conferencing (Google Meet, Microsoft Teams, Zoom, etc.). |
| Practical-II | Formal communication tools and etiquettes (Gmail, Microsoft Outlook, etc.). |
| Practical-III | Social media applications (LinkedIn, Facebook, Instagram, etc.). |
| Week 10 | Practical-I | Intro to MS Excel |
| Practical-II | MS Excel Basic Formulas and Google spreadsheet |
| Practical-III | MS Power Point and Google Slides |
| Week 11 | Practical-I | Effective use of popular search engines (e.g., Google, Bing etc.) to explore World Wide Web |
| Practical-II | Intro to HTML  HTML code |
| Practical-III | Creating Web page  Style formatting in web pages |
| Week 12 | Practical-I | MS Access  (Application Overview) |
| Practical-II | MS Access Table creation |
| Practical-III | MS Access report generation |
| Week 13 | Practical-I | Introduction to Google Fit, Samsung Health, , Xiaomi Mi Band |
| Practical-II | Introduction to Apple Health |
| Practical-III | Introduction to Run keeper, etc. |
| Week 14 | Practical-I | Online banking and financial management tools (JazzCash, Easypaisa, Zong PayMax, ILINK and MNET, Keenu Wallet, etc.). |
| Practical-II | Daraz.pk, Telemart, Shophive, etc. |
| Practical-III | Cyberbullying and online harassment. |
| Week 15 | Practical-I | Working with learning management systems |
| Practical-II | Introduction to Moodle, Canvas, Google Classrooms, etc.). |
| Practical-III | Introduction to Coursera, edX, Udemy, Khan Academy, etc. |
| Week 16 | Practical-I | Intellectual property and copyright issues. |
| Practical-II | Demonstration on ethical considerations |
| Practical-III | Demonstration on ethical considerations (cont…) |