JYOTI NIVAS COLLEGE AUTONOMOUS, BANGALORE
DEPARTMENT OF COMPUTER SCIENCE
DIGITAL FLUENCY

NO OF CREDITS: 02   **NO OF HOURS: 45 HOURS**

COURSE OUTCOMES (COS):

1. Identify and recognize computer hardware, categories of programs, system software and applications. Organize and work with files and folders.
2. Able to perform documentation, operations and presentation skills.
3. To develop innovative and unique graphic content that can be used by different web-based platforms as well as software and technical designs
4. To understand the importance of social networking and digital marketing.
5. Digitally empowering students by training them to use E-governance services efficiently.

UNIT - I   **03 HOURS**
Introduction to Computers - Introduction to Computers, Latest IT gadgets and their applications, Evolution of Computers.
Basics of Hardware - Components of a computer, Central Processing Unit, Input devices, Output devices, Computer Memory & storage.
Basics of Software - Application Software, Systems Software.Utility Software. Open source and Proprietary Software, Mobile Apps, DBMS.
Operating System - Introduction Basics of Operating system, Operating Systems for Desktop and Laptop, Operating Systems for Mobile Phone and Tablets. User Interface/Command line versions for Desktop and Laptop, File management and Types of file Extensions, Introduction to Virus and malware.

UNIT - II   **02 HOURS**
Word Processing - Opening, saving and printing a document, Document creation, formatting of text, paragraph and whole document. Inserting Header and Footer on the document. Finding text on a word document and correcting spellings, Inserting and manipulating tables, enhancing table using borders and shading features, Preparing copies of document labels etc. for sending various recipients using Mail Merge.

Spreadsheet Processing - Opening, saving and printing a Spreadsheet. Spreadsheet creation, inserting and editing data in cells, sorting and filtering of data. Inserting and deleting rows /columns. Applying basic formulas and functions.Preparing charts to represent the information in a pictorial form.

Presentation Software - Basic Knowledge of PowerPoint presentations, Opening/saving a presentation and printing of slides and handouts, Manipulating slides to enhance the look of the slides as well as whole presentation by inserting a picture, objects, multimedia formatting, Running a slide show with various transitions.

UNIT - III   **02 HOURS**
Multimedia - Introduction to Multimedia, Elements of Multimedia System, File Formats, Graphic design tool - Canva
Internet - Introduction to Internet, WWW and Web Browsers

UNIT - IV   **04 HOURS**
Social Networking & E-Commerce - Social & Professional Networks, Microblogging and Instant Messaging — Digital Ethics - Benefits of social networking - Importance of Hashtags - E-Commerce Overview - Advantage and Disadvantages - E-commerce Business Models-

Online payment systems – e-cash, e-cheque, Smart Card, Credit Card, Debit Card, Electronic fund transfer –E-Commerce Security Systems.

Introduction to Digital Advertising and Analytics – What is digital marketing? Traditional & Digital Marketing –How is digital marketing useful? - Understanding different types of Digital Marketing – Search Engine Optimization, Social Media Marketing, Content Marketing, Mobile Marketing.

UNIT - V   **04 HOURS**
E-Governance and Digital Financial tools - What is E-Governance and why it is important? (SMART Governance)- E-Governance Maturity Model - Mission mode Projects by central, state, and integrated level.

Case Studies - Karnataka Context: Computer Aided Administration of Registration Department (*CARD*), BOOMI, E-Panchayat, Khajane (*Karnataka's Online Treasury System*), e-Sewa Portal, DGFT

Digital Financial Tools - Understanding OTP (One Time Password) and QR (Quick Response) Code-   UPI (Unified Payment Interface)-   AEPS (Aadhaar Enabled Payment System) -USSD (Unstructured Supplementary Service Data) -Card (Credit / Debit) -E-Wallet- PoS (Point of Sale)

Internet Banking -   National Electronic Fund Transfer (NEFT)-   Real Time Gross Settlement (RTGS)- Immediate Payment Service (IMPS)

REFERENCE BOOKS:
1. Computer Fundamentals and Office Automation, Dr. R Deepalakshmi, CharulthaPublications Private Limited, 1 January 2019.
2. Computer Basics with office Automation: Archana Kumar, I K International Publishing House Pvt. Ltd, 30 December 2013.
3. Fred Halsall, Multimedia Communications, Pearson Education 2018
4. Electronic Commerce: A Managerial Perspective, Turban, E. et al., Prentice Hall-2008.
5. The Beginner's Guide to Digital Marketing (2015). Digital Marketer. Pulizzi,J.(2014) Epic Content Marketing, Mcgraw Hill Education.
6. The big book of digital marketing, Digital Firefly Marketing- 2017
   https://digitalfireflymarketing.com/wp-content/uploads/2017/02/Big-Book-of-Digital-Marketing.pdf
7. E-Governance: Concepts and Case Studies Hardcover – Illustrated, 1 January 2012.

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DIGITAL FLUENCY LAB LIST
PRACTICAL HOURS: 30 HOURS
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UNIT - I   **06 HOURS**
1. Understanding User interface CLI in Windows Operating system.
2. Pinning applications to the Taskbar, Changing Icons & Creating shortcuts.
3. Installing and running an application.
4. Simple Operating System Settings.
5. Using Mouse and Changing its Properties, Changing System Date and Time,
6. Changing Display Properties.
7. Add or Remove Programs and Features,
8. Adding, Removing & Sharing Printers, File and Folder Management,
9. Antivirus software - installation and scanning.
10. Understanding Keyboard shortcuts.

UNIT - II   **08 HOURS**
1. Activities using Word Processor Software

2. Activities using Spreadsheets Software
3. Activities using Presentation Software
4. Activities using online docs

UNIT - III   **08 HOURS**
1. Create a banner/ Flyer using Graphic design tool
2. Video editing using Graphic design tool
3. Create and publish a website using WordPress
4. Creating - Email account and a survey form
5. Storing and accessing files using storage and synchronization service
6. Learning Google calendar, Google meet and Google chat.

UNIT - IV   **04 HOURS**
1. Create your LinkedIn Profile and apply for a job by uploading your digital resume.
2. Creating a social media account and understanding how microblogging works.
3. Setup an online meeting with any meeting management software.

UNIT - V (Only Demonstrations)   **04 HOURS**
1. How would you book a train ticket using IRCTC e-Ticketing System?
2. How is online Money transfer/online payment done?
3. How would you file a tax return if you had to do it online?
4. How would you go about applying for a passport online?