Department of Computer Science

Loreto College

Syllabus – Computer Competency Course: Digital Productivity Tool (MS Word & Professional Email

Academic Year: 2025–2026
Semester: I
Course Type: Computer Competency Course

Course Objectives

- To develop proficiency in creating, formatting, and managing professional documents using Microsoft Word.
- To enable students to design visually effective presentations using Microsoft PowerPoint.
- To cultivate professional communication skills through formal email writing and digital correspondence.
- To prepare students for academic, professional, and workplace documentation using digital productivity tools.

Course Syllabus

Unit I: Document Workspace and Text Enhancement

- Introduction to Microsoft Word Interface
- Ribbon, Quick Access Toolbar, and Workspace
- Creating, Saving, and Managing Documents
- Font Formatting
- Paragraph Alignment
- Line and Paragraph Spacing
- Text Styling and Formatting

Unit II: Page Structuring and Paragraph Design

- Page Layout
- Margins
- Page Orientation
- Page Size
- Indentation
- Bullets and Numbering
- Headers and Footers
- Page Numbers
- Section Breaks

Unit III: Resume Design and Layout Crafting

- Resume Structure
- Professional Formatting
- Tables and Alignment
- Tab Stops
- Consistent Typography
- Resume Templates
- Exporting Resume as PDF

Unit IV: Formatting Academic Documents

- Designing Title Pages
- Applying Styles
- Inserting Pictures and Illustrations
- Creating and Formatting Tables
- Captions
- Basic Citation and References
- Document Review and Printing

Unit V: Visual Elements and Theme Styling

- SmartArt Graphics

- Shapes
- Tables
- Charts (Introduction)
- Icons
- Theme Customisation
- Hyperlinks

Unit VI: Email Composition and Formal Writing

- Introduction to Email Communication
- Email Etiquette
- Writing Effective Subject Lines
- Professional Greetings and Closings
- CC and BCC
- Drafting Formal Emails
- Mail Merging

Unit VII: Attachments and Real-world Communication

- Attaching Documents and Files
- Sending Professional Emails
- Job Application Emails
- Leave Application Emails
- Academic Communication
- Following Up Professionally
- Email Safety and Best Practices

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Computer Competency Course – MS Excel

Academic Year: 2025–2026
Semester: I
Course Type: Computer Competency Course

Course Objectives

- To equip students with essential Microsoft Excel skills for effective data handling, formatting, analysis, and visualisation.
- To develop competency in creating and managing spreadsheets for academic and workplace applications.
- To enable students to perform calculations using formulas and functions, organise datasets, and generate meaningful graphical representations.
- To introduce students to techniques for importing, cleaning, and exporting data efficiently.

Course Syllabus

Unit I: Introduction to Microsoft Excel

- Introduction to Spreadsheet Software
- Excel Interface and Components
- Creating, Opening, Saving, and Closing Workbooks
- Workbook and Worksheet Navigation
- Cell References and Basic Data Entry

Unit II: Basic Excel Functions

- Introduction to Formulas
- AutoSum
- Mathematical and Statistical Functions:
  - SUM
  - AVERAGE
  - MIN
  - MAX
  - COUNT
- Basic Formula Construction

Unit III: Data Entry and Formatting

- Types of Data
- Font and Cell Formatting
- Number Formatting
- Cell Alignment
- Borders and Fill Colours
- Conditional Formatting

Unit IV: Data Manipulation

- Sorting Data
- Filtering Records
- Removing Duplicate Entries
- Managing Large Data Sets

Unit V: Text Functions

- Text Manipulation Functions:
  - LEFT
  - RIGHT
  - MID
  - CONCATENATE
  - TRIM
  - LEN
- Practical Applications of Text Functions

Unit VI: Date and Time Functions

- Date Functions:
  - DATE
  - YEAR
  - MONTH
  - DAY
- Time Functions:
  - TODAY
  - NOW
- Working with Date Calculations

Unit VII: Logical Function

- IF Function
- Syntax and Usage
- Nested IF (Introduction)
- Practical Decision-Making Applications

Unit VIII: Charts and Graphs

- Introduction to Data Visualisation
- Bar Charts
- Line Charts
- Pie Charts
- Chart Formatting and Customisation
- Selecting Appropriate Chart Types

Unit IX: Data Import and Export

- Importing Data from CSV Files
- Text to Columns
- Flash Fill
- Exporting Worksheets in Different Formats
- Basic Data Cleaning Techniques

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Computer Competency Course – HTML

Academic Year: 2025–2026
Semester: II
Course Type: Computer Competency Course

Course Objectives

- To introduce students to the fundamentals of web page development using HTML.
- To enable learners to create structured, interactive, and visually appealing web pages.
- To develop practical skills in designing webpages using text, images, tables, forms, multimedia, and semantic HTML elements.
- To promote logical organisation of content and awareness of accessible web design practices.

Course Syllabus

Unit I: Introduction to HTML and Document Structure

- Introduction to HTML
- Structure of an HTML document
- HTML Editors and Browser
- Basic Tags:
  - <html>
  - <head>
  - <title>
  - <body>
- Body Attributes
- Paragraph Tag (<p>)
- Line Break (<br>)
- Font Tag (<font>)

Unit II: Text Formatting and Headings

- Horizontal Rule (<hr>)
- Text Formatting Tags
  - <b>
  - <i>
  - <u>
  -
  -
  - <strike>
- HTML Comments
- Heading Tags (<h1> to <h6>)

Unit III: Lists in HTML

- Ordered Lists (<ol>)
- Unordered Lists (<ul>)
- List Items (<li>)
- Applications of Lists in Web Pages

Unit IV: Images and Text Enhancement

- Image Tag (<img>)
- Image Attributes
- Superscript (<sup>)
- Subscript (<sub>)
- Center Tag ( )
- Text Emphasis and Formatting

Unit V: Tables in HTML

- Creating Tables
- Table Structure
  - <table>
  - <tr>
  - <th>
  - <td>
- Table Attributes
- Formatting Tables

Unit VI: HTML Forms – Basic Controls

- Introduction to HTML Forms
- Form Tag (<form>)
- Input Controls (<input>)
- Types of Input Fields
- Basic Form Design

Unit VII: HTML Forms – Advanced Controls

- Label (<label>)
- Drop-down List (<select>, <option>)
- Text Area (<textarea>)
- Button (<button>)
- Marquee (<marquee>)
- Designing Interactive Forms

Unit VIII: Hyperlinks and Semantic HTML

- Hyperlinks (<a>)
- Internal and External Links
- Introduction to Semantic HTML
- Semantic Elements:
    - <header>
    - <footer>
    - <nav>
    - <main>
    - <section>
    - <article>
    - <aside>