Computing Lab 2
BA Sanskrit

Course Category: Proficiency	**Schedule of Offering: Semester 4**
Course Code: LL 441	
Course Credit Structure: 1	

- **Lecture : 0 Hours per week**
- **Tutorial : 0 Hour per week**
- **Practical : 2 Hours per week**

Contact Hours per week:	**2 Hours per week**
Course Coordinator and Instructor:	**Dr. Pavankumar Satuluri**

Introduction:

This course is designed to provide hands-on experience of computing tools for document processing such as LaTeX and basic knowledge of HTML(HyperText Markup Language) and CSS(Cascading Style Sheets) for creating the Websites. In LaTeX, the student would learn the concepts like preparing documents and presentations, Text Formatting, Tabular environment and preparing presentations and bibliography, etc. In HTML, the student will learn the concepts such as the basic structure of HTML documents, Markup tags, Lists, Insertion of Hyperlinks and Multimedia etc. In the case of CSS, the student will learn to create style sheets, color, and border properties.

Course Objectives:

The main objectives of this course are to:

- Prepare high-quality documents using LaTeX

- Prepare presentations using Beamer

- Create documents using online editors such as Overleaf

- Develop a website using HTML and CSS

Pre-requisites:

Before taking this course, the student should have passed the following courses:
- *Computing for Business and Society*
- *Computing Lab 1*

Reading Material:

- Grätzer, George. *Practical LaTeX,* Springer International Publishing, Switzerland, 2014
- Van Dongen, Marc. *LaTeX and Friends,* Springer Science & Business Media, 2012.
- Stefan, Kottwitz. *LaTeX Beginner's Guide,* Packt Publishing Ltd, 2011.
- Jon Duckett, *HTML and CSS:Design and Build Websites,* John Wiley & Sons, Inc., Indianapolis, Indiana, 2011.

Module-wise topics:

Module 1: Introduction to Latex
- Basics, Document Hierarchy, Labels and cross-referencing
- Text Formatting, Fonts, Colors, Special Characters, Adding Pictures, Footnotes, Bibliography.
- Creating Tables: Tabular environment, Specing, Spanning, Size

Module 2: Presentations Using Latex

- Beamer
- Overleaf (Online editor)

Module 3: Introduction to HTML

- What is HTML ?
- Basic structure of an HTML document
- Creating an HTML document
- Mark up Tags

Module 4: Introduction to elements of HTML .
- Lists, Tables and Frames
- Hyperlinks, Images and Multimedia
- Forms and controls

Module 5: Introduction to Cascading Style Sheets
- Concept of CSS
- Creating Style Sheet
- CSS Properties
- CSS Styling(Background, Text Format, Controlling Fonts)
- Lists and Tables
- CSS Id and Class

Pedagogy

This course will run in practice mode, where the focus will be on hands-on experience of some computing tools. There will be assignments supporting the learning and a group project to solve some real-life problems.

Evaluation

- Midterm Lab $\qquad$ 20 Points
- Controlled Lab $\qquad$ 40 Points
- Record $\qquad$ 40 Points

Total $\qquad$ 100 Points