Department of Computer Science and Engineering
National Institute of Technology Karnataka, Surathkal

Course Plan

Course name: Computing lab	**Course no:** CS702 & CS801	**No. of credits (L-T-P):** (0-0-3) 2
Year & semester: 2019, 1st Semester	**Course type:** Pc	**Academic session:** Odd

Prerequisites (if any): Basic knowledge of at least one programming language.

Objectives:

The objectives of this course are as follows:

1. Introduction and use of latex.
2. Introduction of basics of latex for preparing technical report, article and presentations.
3. Discussion of different types of web development environments, and design of a web site by using any one of the environment.
4. Introduction of different types of tools and techniques for gathering and analysing the software development related information.

Course (Learning) outcomes (COs)

CO1 – Understand the need, importance and use of latex.

CO2 – Design and development of a creative, informative and secure web site.

CO3 – Understanding the overall development process of safe and secure software.

Mapping of COs with POs:

(Strength of correlation: S-Strong, M-Medium, W-Weak)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	S	S	S	S	M	W	W	W	W	S	W	W
CO2	S	S	S	S	M	W	W	W	W	S	W	W
CO3	S	S	S	S	S	W	S	W	W	W	W	W

1. Teaching learning interaction

Sl. No.	Task	Description of task	No. of L-T-P hours
1.	Latex	❖ Install TEXMAKER ❖ User Manual ❖ Prepare a creative and informative resume, curriculum vitae and biodata by using Latex. ❖ The resume should include recent experiences with responsibilities and achievements, previous	0-0-3

		experiences as summary, qualifications and/or professional affiliations and your brief profile. ❖ The curriculum vitae should list out your skill, all the jobs and positions held, degrees and professional affiliations. Basically, student should highlight their general talent rather than particular skill for a position. ❖ The bio-data should include personal particulars like date of birth, gender, religion, race, nationality, residence, and marital status followed by chronological listing of education and experience.	
2.	Latex	❖ Prepare technical report, article and power point presentations (PPTs) using latex. ❖ Each report, article and PPTs should include at least one table, figure, equation, quotation mark, and a few bullet points.	0-0-3
3.	Web designing	❖ Design a web page by using HTML and CSS, JSON/ ANGULARJS/ JAVASCRIPT, SQL/ PHP/ ASP/ RASBPERRY Pi, JAVA/ PYTHON/. NET that must include all the components of your resume along with some other components of your choice.	0-0-9
4.	Web Application Development	❖ Apartment Management Software ❖ Feasibility Study, selection of software development life cycle and execution of its phases like planning, requirement gathering and analysis, design and prototyping, software development, testing, and deployment.	0-0-18

Note: Each task must be completed and demonstrated within the assigned hours.

2. Evaluation scheme:

1. First task - 10%
2. Second task - 15%
3. Third task – 20%
4. Fourth task – 50%
5. Attendance – 05%

3. List of text books & reference books, on-line course resources

TEKMAKER

✓ https://www.xm1math.net/texmaker/download.html

User manual

✓ https://www.xm1math.net/texmaker/doc.html

4. Recommended reading materials:

Difference between resume, curriculum vitae and bio-data

- ✓ https://www.spinxdigital.com/blog/common-web-design-languages-what-they-do-and-why-you-need-them/

Web designing

- ✓ https://1stwebdesigner.com/best-web-designer/
- ✓ https://www.getsetresumes.com/blog/143-difference-between-resume-cv-and-biodata/

Quick learning of languages, tools and techniques

- ✓ https://www.w3schools.com/

Makefile

- ✓ https://www.systutorials.com/1643/a-simple-makefile-for-latex/
- ✓ https://file.systutorials.com/cache/get?https://raw.github.com/zma/makefile4latex/master/Makefile
- ✓ https://robjhyndman.com/hyndsight/makefiles/

5. Computing lab fair practice instructions:

Students are instructed to adhere to the following fair practice norms during the computing lab.

- ➢ Each student is instructed to complete every task individually.
- ➢ Students are free to refer to any material available online and offline, but they are not allowed to copy that material.
- ➢ Plagiarism in any form is strictly prohibited and punishable.
- ➢ Each student should demonstrate or present the task on or before the deadline mentioned above.
- ➢ Students are instructed to create a "MAKEFILE" of each completed task.
- ➢ Students must submit the assignment through email to the instructor on or before the given deadline at mp_singh@nitk.ac.in.

6. Name and contact details of course instructor:

Mahendra Pratap Singh
Assistant Professor,
Phone: - +91-824-2473402,
Email-id:-mp_singh@nitk.ac.in, mahoo15@gmail.com

Course Instructor