

*Syllabus* : Laboratory will be set in consonance with the material covered in CS301. The syllabus also includes Overview of Unix system, commands and utilities; Basic Linux administration and installation: grub, rpm, yum, disk partitioning; Basic Linux utilities, logging, backup, authentication; Internet mail system: send mail, elm, mail administration; Program Maintenance: make, sccs, debugging with gdb and ddd; Archiving: shar, tar; Shell use: redirection, .cshrc, environment variables; Regular Expression parsing: grep, egrep, sed, awk; Shell programming: bash; Scripting Languages like Perl, Python, Java Script; Database Driven Web Site: PHP and MySQL;

*Texts* :

*References* :

1. Bennett S., McRobb S. & Farmer R., Object Oriented Systems Analysis and Design using UML, Tata McGraw-Hill, second edition, 2004.
2. J. Greenspan and B. Bulger, MySQL/PHP Database Applications, M&T Books, 2008
3. E. Nemeth, G. Snyder and T. R. Hein, Linux Administration Handbook, Prentice Hall PTR, 2002.
4. D. Curry, UNIX Systems Programming for SVR4, O'Reilly, 1996.
5. S. Kochan and P. Wood, Unix Shell programming, 3rd Ed, SAMS, 2003.
6. D. Flanagan, Javascript: The Definitive Guide, Fifth Edition, O'REILLY, 2006.
7. D. Gosselin, PHP Programming with MySQL, Course Technology, 2006.