

## COURSE DESCRIPTION

Department and Course Number	<b>CS 333 (formerly CS 344)</b>	Course Coordinator	<b>Bangalore</b>
Course Title	<b>Unix Operating System Fundamentals</b>	Total Credits	<b>1</b>

### Current Catalog Description

*Unix architecture, concepts, and principles, shell concepts and principles, filters, I/O redirection, environment, process management, runtime architecture.*

### Textbook

*Introduction to Unix and Linux, by John Muster, McGraw-Hill Osborne Media, 2003.*

### References

### Course Goals

- To introduce UNIX OS principles.*
- Provide hands-on experience using UNIX through assignments.*

### Prerequisites by Topic

*Computer Organization & Assembly Language Programming (with grade of "C" or better)*

### Major Topics Covered in the Course

<i>Touring the Features of UNIX/Linux</i>
<i>Editing with the Visual Editor</i>
<i>Using Basic UNIX Utilities</i>
<i>Creating and Changing UNIX Directories</i>
<i>Setting File and Directory Permissions</i>
<i>Using Multiple Utilities in Scripts and Accessing and Changing Previous Commands</i>
<i>Specifying Instructions to the Shell and Controlling User Processes</i>
<i>Shell Programming</i>
<i>Managing, Printing, and Archiving Large Files</i>

Laboratory projects (specify number of weeks on each)

*5 Assignments with 2 weeks for each assignment*

Estimate CSAB Category Content

	CORE	ADVANCED		CORE	ADVANCED
Data Structures	_____	_____	Computer Organization and Architecture	_____	<u>2</u> _____
Algorithms			Concepts of Programming Languages	_____	_____
Software Design	_____	<u>5</u> _____			

Oral and Written Communications

*None*

Social and Ethical Issues

*None*

Theoretical Content

*None*

Problem Analysis

*Each of the programming assignments involves analyzing the functionality of the programs.*

Solution Design

*Each programming assignment requires designing a solution, implementing, and testing the solution.*