

SRM UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
SCHOOL OF BIOENGINEERING
DEPARTMENT OF BIOINFORMATICS

BI0309- PERL PROGRAMMING & BIOPERL

LECTURE PLAN

Semester: V
 Code: BI0309

Course: Perl Programming & Bioperl
 Staff Handling: Ms. Lavanya S

Lecture Hour	Contents	Learning Outcome
1	UNIT 1 UNIX OS AND EDITORS Introduction to Unix and Editors	The chapter introduces UNIX and Editors, working environment, creating and manipulating files, Vi editor and about FTP.
2	UNIX OS	
3	Working Environment	
4	Navigating in Unix	
5	Creating files	
6	manipulating files	
7	emacs editor	
8	Vi editor	
9	FTP	
10	UNIT 2 UNIX COMMANDS Introduction to UNIX commands	The chapter describes detailed about the advanced UNIX commands and its usage.
11	Introduction to advanced UNIX commands	
12	Detail Description about UNIX commands	
13	Advanced UNIX commands – ls	
14	Advanced UNIX commands – cat, more	
15	Advanced Unix commands – mv, rm	
16	Advanced Unix commands – rmdir	
17	Advanced Unix commands - Uniq, sort	

18	Advanced Unix commands – grep	
Lecture Hour	Contents	Learning Outcome
19	UNIT 3 PERL Introduction to Perl	The Chapter includes the introduction about the scalars, Arrays, Perl modules and its applications, Perl regular expressions and its applications
20	Introduction to scalars	
21	Usage of scalars	
22	Introduction to Arrays	
23	Usage of Arrays	
24	Using standard Perl modules	
25	Applications of standard Perl modules	
26	Perl regular expressions I	
27	Applications of Perl regular expressions I	
28	UNIT 4 Introduction to debugger	
29	Perl debugger	
30	Introduction to array operation	
31	Advanced array operation	
32	Perl regular expression II	
33	Perl control statements	
34	File I/O	
35	Perl subroutines	
36	Perl Functions	

Lecture Hour	Contents	Learning Outcome
37	UNIT 5 Introduction to installation	Methods involved installation, procedures, steps to be followed, maintenance, about Bioperl
38	Supporting files for installation	

39	Procedures for the installation	and its usage.
40	Steps to be followed for the installation	
41	Maintenance after installation	
42	Introduction to Bioperl modules	
43	Various Bioperl modules	
45	Usage of Bioperl modules	
46	Applications of Bioperl modules	

TEXT BOOKS

1. Harshawardhan P Bal, *Perl Programming for Bioinformatics*, Tata McGraw Hill, 2003.
2. James Tisdall, *Mastering Perl for Bioinformatics*, O'Reilly, 2003.

REFERENCE BOOKS

1. D.Curtis Jamison, *Perl Programming for Bioinformatics & Biologists*, John Wiley & Sons, INC., 2004
2. Michael Moorhouse, *Paul Barry, Bioinformatics Biocomputing and Perl*, Wiley, 2004.