



हिमाचलप्रदेशकेंद्रीयविश्वविद्यालय
Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
Academic Campus, Shahpur, Distt. Kangra, Himachal Pradesh-
176206

Course Title: Coding with PERL for Beginners

Course Code: BIN 423

Total Hours: 20

Learning Outcomes: The subject will help the students to get started with PERL language. At the end of this subject, the students will be able to understand the fundamentals of PERL and implication of PERL concepts to characterise a problem and design problem-solving programs.

Course Content:

Fundamentals: Introduction to PERL, PERL Installation, PERL syntax and naming convention, Operators, Variables, Modules.

Control Flow: Decision making (– if and if-else statements, Nested if-else statement, else-if ladder), Loops (– for, for each, while, do-while, until and do-until statements, next, last, continue, exit, redo statements.)

Arrays, List, Hashes: Array and array-operations (slice, push, pop, shift, unshift), PERL list and types, Hash and hash-operations.

Scalars and Strings: Scalars, Comparing scalar, Interpolated and escaped strings, String operations, String functions.

Regular expression and File Handling: Operators in Regex (Matching with m//. Binding operator =~ Pattern matching, substitution operator, transliteration operator), Opening and Reading a file, Writing to a file, Usage of die function.

Transactional modes: Lectures; Tutorial; Problem solving, Self-learning

Suggested Readings:

- Schwartz et al. (2011), Learning PERL. O'Reilly
- James Tisdall(2001), Beginning PERL for Bioinformatics. O'Reilly
- James Tisdall(2007), Mastering PERL for Bioinformatics. O'Reilly