Courses taken at University of Nebraska- Lincoln:

1. CSCE 311: Data Structures and Algorithms (Python; 3 credits)
Syllabus:
This is an introductory course to algorithms and data structures for students with diverse background interested in informatics. Foundational coverage of algorithms includes both problems (such as indexing, searching, sorting, and pattern matching) and methods (such as divide-and-conquer, dynamic programming, greedy, network flow and graph theory). Foundational coverage of data structures includes lists, tables, trees, graphs, and multidimensional arrays. Advanced topics will be studied in the context of informatics applications. Specifically, students will learn the fundamental ideas for how to efficiently analyze biological DNA sequence and images, and how to solve challenging problems in general informatics.

2. BIOS 428/828 Perl Programming for Biological Applications (3 credits)
Syllabus:
This course teaches the student the basic skills of computer programming, using the Perl programming language. The Perl language is widely used in the biological sciences, and as such this course will use those domains to exemplify concepts learned during this course. Although Perl is especially prevalent in computational biology, bioinformatics, and genomics the course will demonstrate how Perl can be applied to a wider range of biological sciences (from the instructor's own experience), including but not limited to agronomy, ecology, ethology, and microbiology. It is understood that real expertise in programming comes with a lot of practice: this course will not make the student a highly skilled programmer but will lay a strong foundation in the general concepts and will demonstrate that it is relatively easy to use Perl for the student's (future) biological research topics where data processing and analysis is required.

Courses taken at South Dakota State University:

3. STAT 541 Statistical Methods II
Syllabus:
Simple and multiple linear regressions
ANOVA for one or multiple factors
Design of experiments
Linear models with categorical data
Models with categorical response variable

4. STAT 600 Statistical Programming
Syllabus:
R programming
Formatting
Aggregation
Loops
Dynamic report generation (Sweave/Knitr)

External data sources
SAS programming
Defining and using macro variables and macros
PROC SQL in Macros
Graphing in SAS

5. STAT 601 Modern Applied Statistics I
Syllabus:
Introduction to Statistical Graphics and GGplot
Logistic Regression I
Generalized Linear Models
Density Estimation
Recursive Partitioning
Generalized Additive Models and Spline Models
Survival Analysis
Longitudinal Data Analysis and Mixed Models
Multiple Comparisons
False Discovery Rates
Simultaneous Inference
Meta-Analysis

6. STAT 602 Modern Applied Statistics II
Syllabus:
Introduction to Statistical Learning
Introduction to Classification
Resampling Methods
Model Selection
"Moving Beyond Linearity"
Tree- Based Methods
Support Vector Machines
ROC curves
Clustering/Unsupervised Learning

Courses taken at Microsoft training institute, Nepal (1 semester training):

6. PhP/MySQL
Syllabus:
PHP Basics
Flow Control
Arrays
PHP and HTML Forms
String Manipulation
Reusing Code and Writing Functions
Simple SELECTs

Advanced SELECTs
Subqueries, Joins and Unions
Inserting, Updating and Deleting Records
Managing Data
MDB2
Authentication with PHP and SQL
Regular Expressions
Session Control and Cookies
Sending Email with PHP
File System Management

7. ASP.NET

Syllabus:

Understand the development and deployment cycles of enterprise applications.
Utilize the .NET framework to build distributed enterprise applications.
Develop ASP.NET Web Services, secure web services, and .NET remoting applications.
Understand the protocols behind web services.
Understand the 3-tier software architecture (presentation/client tier, application tier, data tier) and develop multi-tier applications.
Understand and experiment with the deployment of enterprise applications.