Module Specification:

Credit Hours:

3(1+2)

Course description:

This is a practical course designed to train students in the use of public data banks & software to retrieve, analyze, and assemble biological data with special emphasis on concepts relating to gene and protein structures.

Marks distribution:

Lab marks divided as following:

Mid-term exam	**10 marks**
Practical work	**5 marks**
Final Exam	**15 marks**
Total	**30 marks**

Topics to be covered:

1. Sequence analysis and database display
2. Introduction to internet resources
3. Designing PCR primers
4. Electronic PCR
5. Practicing ENSMBLE
6. Introduction to BLAST suite and BLASTN
7. Protein BLAST (BLASTP)
8. ExPASy (translate tool)

Book References:

− Michael Agostino (2013) *Practical Bioinformatics* (first edition), Garland Science, Taylor & Francis Group, New York & London.