

Module description

Module title: Bioinformatics– practical part.

Module code: BCH 463

Year: 1446 H (2025) – Second semester.

Mark distribution:

Total mark is 30:

- 3 marks for weekly exercise
- 4 marks for assignment (Submitting date: April 14, 2025)
- 9 marks for mid-term exam (February 17, 2025)
- 14 marks for final exam (within week 17 or 18)

Module labs:

#	Lab Title	Date
1	NCBI overview and searching in PubMed database	13 Jan
2	Nucleotide, Gene and OMIM Databases	20 Jan
3	Practicing ENSEMBL genome browser	27 Jan
4	Introduction to BLAST suite and BLASTN	3 Feb
<i>Mid-term revision</i>		10 Feb
5	Designing PCR primers (PRIMER 3Plus) and in-silico PCR (USCS)	24 Feb
6	Protein databases (NCBI and Uniprot)	3 Mar
7	Protein sequence alignment and ExPASy Tools	10 Mar
8	Structure visualization using Jmol	7 Apr
<i>Final revision</i>		14 Apr

Book Reference:

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