

**Module description**

**Module title:** Bioinformatics– practical part.

**Module code:** BCH 463

**Year:** 1445 H (2023) – First semester.

**Mark distribution:**

Total mark is 30:

- 3 marks for weekly exercise
- 4 marks for assignment (Submitting date: November 19, 2023)
- 9 marks for mid-term exam (October 1, 2023)
- 14 marks for final exam (November 26, 2023)

**Module labs:**

Lab Title	Date
NCBI overview and searching in PubMed database	27 Aug
Nucleotide, Gene and OMIM Databases	3 Sep
Practicing ENSEMBL genome browser	10 Sep
Introduction to BLAST suite and BLASTN	17 Sep
<i>Mid-term revision</i>	??
Designing PCR primers (PRIMER 3Plus) and in-silico PCR (USCS)	8 Oct
Protein databases (Consensus, NCBI, Uniprot, and IHOP)	15 Oct
Protein sequence alignment and ExPASy Tools	22 Oct
Structure visualization using Jmol	29 Oct
DNA cutter tools	5 Nov
<i>Final revision</i>	??

**Book Reference:**

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