

Module description

-Module title: Bioinformatics– practical part.

-Module code: BCH 436

-Year: first semester 1443 H.

-Mark distribution:

Total mark is 30:

- 3 marks for weekly exercise.
- 5 marks for homework.
- 9 marks for mid-term exam.
- 13 marks for final exam.

-Module labs:

1. NCBI overview and searching in PubMed database.
2. Nucleotides and Gene databases.
3. Practicing ENSEMBL genome browser.
4. Designing PCR primers (PRIMER 3Plus) and in-silico PCR (USCS).
5. Protein databases (NCBI, and Uniprot).
6. ExPASy Tools and Structure visualization using jmol.
7. Sequence Alignment Tools and its Applications.

-Book Reference:

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