

Module description

-Module title: Molecular Biology– practical part.

-Module code: BCH 361

-Year: 1438-1439H (2018) – Second semester.

-Module objective:

- Practical knowledge in the molecular biology field.
- Understand the principles behind basics molecular biology techniques.
- Working in basic experiments of molecular biology lab.

-Mark distribution:

Total mark is 25:

- 4 marks for quizzes.
- 4 marks for analysis sheet.
- 2 marks for homework.
- 3 marks for presentation.
- 12 marks for final exam.

-Module experiments:

| NO. | Experiment Title | Date |
|-----|--|--------------------------|
| 1 | Introduction to Molecular Biology. | 15-5-1439 1-Feb-2018 |
| 2 | DNA Extraction from Blood. | 22-5-1439 8-Feb-2018 |
| 3 | DNA Extraction from Plant Tissue. | 29-5-1439 15-Feb-2018 |
| 4 | Characterization of DNA by Spectrophotometric Assay and Melting Temperature (T _m). | 6-6-1439 22-Feb-2018 |
| 5 | Agarose Gel Electrophoresis (AGE). | 13-6-1439 1-Mar-2018 |
| 6 | Polymerase chain reaction (PCR) and primer design. | 20-6-1439 8-Mar-2018 |
| 7 | PCR- Optimization of Annealing Temperature | 27-6-1439 15-Mar-2018 |
| 8 | PCR Troubleshooting. | 5-7-1439 22-Mar-2018 |
| 9 | Digestion of DNA with Restriction Enzymes. | 12-7-1437 29-Mar-2018 |
| 10 | Sanger Sequencing. | 19-7-1439 5-Apr-2018 |
| 11 | Presentation. | 29-7-1439 15-Apr-2018 |

-Final exam date: