

Approval: 9th Senate Meeting

Course Name: Analytical and Molecular Biotechnology Lab

Course Number: BY522P

Credit: 0-0-2-1

Prerequisites: None

Students intended for: M. Tech. Biotechnology

Elective or Core: Core Lab for M. Tech. Biotechnology

Semester: Odd/Even

Course Structure:

- Experiments on the application of different spectroscopic techniques
- Experiments on the application of chromatographic and blotting techniques
- Experiments on the application of different microscopic techniques
- Experiments on the application of Flow Cytometry, ELISA based techniques and/or Real Time PCR
- DNA extraction – genomic and plasmid
- Restriction digestion and mapping of DNA
- Gene cloning
- PCR
- Protein expression optimization using IPTG and auto-induction methods
- Protein purification using affinity column chromatography