



Department of biology



Department of biology

2025-2026

((Analytical Chemistry))

Stage (-First Year -)

Instruments and Equipment Used in an Analytical Chemistry Laboratory

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First: Glassware in the Analytical Chemistry Laboratory

1- Volumetric Flask

Use: Preparation of standard solutions with high accuracy.

2- Burette

Use: Accurate delivery of solutions during titration.

3- Volumetric Pipette

Use: Transfer of a fixed volume with high precision.

4- Graduated Pipette

Use: Transfer of variable volumes with moderate accuracy.

5- Beaker

Use: Mixing, heating, and holding solutions.

6- Erlenmeyer Flask

Use: Performing titrations without spillage.

7- Graduated Cylinder

Use: Measuring liquid volumes with moderate accuracy.



Second: Instruments in the Analytical Chemistry Laboratory

1- Analytical Balance

Use: Highly accurate measurement of mass.

2- pH Meter

Use: Precise measurement of solution acidity or alkalinity.

3- UV–Visible Spectrophotometer

Use: Determination of concentration based on light absorbance.

4- Conductivity Meter

Use: Measurement of ionic concentration in solutions.

5- Magnetic Stirrer

Use: Homogeneous mixing of solutions.

6- Water Bath

Use: Heating samples at a constant temperature.