

Program: Chemistry (15025012071P6)**Course:** SAMPLING AND SAMPLE PREPARATION**Code:** PPGQU0055**Workload:** 60 hours**Credits:** 04**Syllabus:**

Schematic approach to sampling and sample preservation according to standard regulations; Discussion of the main methods used for sample preparation in analytical measurements, for both organic and inorganic compounds; Steps in the general approach to chemical analysis; Classification and selection of analytical methods; Sampling and sample preparation for analysis; Obtaining a representative sample; Sampling of homogeneous solutions; Sample pre-treatment; Sample preparation for analysis: Sources of errors in decomposition and dissolution; Sample solubilization; Interference and general separation methods.

Bibliography:

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FLORES, E. M. M. Microwave-Assisted Sample Preparation for Trace Element Determination, 1st Ed., Elsevier, Amsterdam, 2014.

SKOOG, D. A., WEST, D. M., HOLLER, F. J., CROUCH, S. R. Fundamentals of Analytical Chemistry, 9th ed. (translated), São Paulo: Cengage Learning, 2018.

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KINGSTON, H. M. and HASEWELL, S. J. Microwave-Enhanced Chemistry - Fundamentals, Sample Preparation and Applications, American Chemical Society, 772p, 1997.

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