

Code: QA318								
Name: Química Analítica Experimental (Engenharia Química)								
Name in English: Experimental Analytical Chemistry (Chemical Engineering)								
Name in Spanish: Química Analítica Experimental (Ingeniería Química)								
Subject type: Weekly								
Approval Type: Grade and frequency								
Characteristic: Regular								
Frequency: 75%								
Period Type / Offering period: Semi-annual / Every period								
Requires Final Exam: Yes								
Vectors								
T	L	P	O	PE	OE	SL	WEEKS	CREDITS
0	4	0	0	0	0	4	15	4
Occurrence on curriculum: 09, 39								
Pre requirement: QA317 + QI244 or QA317 + QG101 + QG102								
Summary: Errors and data treatment. Volumetry. Fundamentals of spectrochemical, electrochemical, and separation methods of analysis.								
Program: Calibration of volumetric apparatuses. Neutralization titration. Sample preparation of organic and inorganic compounds. Potentiometry. Potentiometric titration. Spectrophotometry. Molecular fluorescence. Absorption and emission atomic spectrometry. High performance liquid chromatography. Gas chromatography.								
Basic Bibliography								
1) SKOOG, D.A.; WEST, D.M.; HOLLER, F.J.; CROUCH, S.R. Fundamentos de Química Analítica . tradução da 9. Ed. São Paulo: Cengage Learning, 2015. 950 p.								
2) HARRIS, D.C. Análise Química Quantitativa . 9. Ed. Rio de Janeiro: LTC, 2017. 774 p.								
3) BACCAN, N.; DE ANDRADE, J.C.; GODINHO, O.E.S.; BARONE, J.S. Química Analítica Quantitativa Elementar . 3. Ed. São Paulo: Edgard Blücher, 2001. 308 p.								
Supplementary Bibliography								
1) SKOOG, D.A.; HOLLER, F.J.; NIEMAN, T.A. Princípios de Análise Instrumental , 5 a edição, Bookman, Porto Alegre, 2002.								
2) DANZER, K. Analytical Chemistry: Theoretical and Metrological Fundamentals . Berlin: Springer, 2007. XXXII, 316. E-book								
4) COLLINS, C.H.; BRAGA, G.L.; BONATO, P.S. Fundamentos de Cromatográficos , Editora da Unicamp, 2006.								
5) BRETT, A.M.O.; BRETT, C.M.A., Electroquímica, Princípios, Métodos e Aplicações . Coimbra: Oxford University Press, 1996. 471 p.								