



UNIVERSITY OF CAMPINAS
INSTITUTE OF CHEMISTRY



PROGRAMS AND BIBLIOGRAPHIES

Discipline	
Code	Name
QO622	Experimental Organic Chemistry II

Vector
OF:S-2 T:002 P:000 L:006 O:000 D:000 HS:008 SL:008 C:008 AV:N EX:S FM:75%

Pre requisite
QG564 QO423 QO424/ QG565 QO423 QO424

Abstract
Qualitative analysis of organic compounds using chemical and physical methods. Projects of organic synthesis and natural products.

Program
<ol style="list-style-type: none">1. Presentation, objectives and characteristics of the QO622 discipline;2. Laboratory safety;3. Qualitative organic analysis;4. Preliminary tests (sodium fusion, ignition, Beilstein, solubility);5. Specific tests (unsaturations, alcohols, halides, nitro group, aldehydes and ketones, carboxylic acids and derivatives, phenols, amines);6. Analysis of unknown samples;7. Projects of organic synthesis and natural products:8. Synthesis of 3-4 steps of natural substances, drugs, biologically active substances or of interest for spectroscopic study;9. Characterization of the synthesized substances using infrared spectroscopy, hydrogen and carbon-13 nuclear magnetic resonance and mass spectrometry.

Bibliography
<ol style="list-style-type: none">1. D. L. Pavia, G. M. Lampman, G. S. Kriz, R. G. Engel, "Introduction to Organic Laboratory Techniques: A Microscale Approach", Thompson Brooks/Cole, 4ª edição, 2007.2. T. W. G. Solomons, C. B. Fryhle, "Química Orgânica", LTC grupo Gen, 10ª edição, 2012.3. Vogel, A. I., Tatchell, A. R.; Furnis, B. S.; Hannaford, A. J.; Smith, P. W. G. "Textbook of Practical Organic Chemistry", Logman, 4ª edição, 3ª impressão, Londres, (1981).4. Lide, D.R. "Handbook of Chemistry and Physics", C.R.C. Press, 84ª edition, Boca Raton, (2004).5. National Research Council, "Prudent Practices in the Laboratory: Handling and Disposal of Chemicals", National Academy of Science, 1ª edição, 3ª impressão, Washington, D. C., 2000.

Evaluation Criteria
The evaluation criteria of the discipline are defined by the Professor, based on the provisions of Section I - General Standards, Chapter V - Student Assessment in Discipline, of the General Undergraduate Regiment. Frequency: 75% (* The benefit of absences will be considered within the provisions of chapter VI, section X, article 72 of the General Undergraduate Regiment)