



**PROGRAMS AND BIBLIOGRAPHY**

<b>Subject</b>	
<b>Code</b>	<b>Name</b>
QG102	Experimental Chemistry I
<b>Vector</b>	OF:S-5 T:001 P:000 L:003 O:000 D:000 HS:004 SL:004 C:004 AV:N EX:S FM:75%

<b>Pre requirement</b>	None
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**Summary**

Experiments introducing the scientific method, equivalent weight, chemical bonding, oxidation-reduction, chemical equilibrium, pH, solubility product, synthesis and purification of substances.

**Program**

Introduction to the discipline. Laboratory Security. Chemical and physical phenomena. Determination of the equivalent of a metal. Quantitative study of a metal-acid reaction. Continuous variation method. Determination of molecular weight of a volatile substance by the density method. Fusion point of a pure substance. Chemical equilibrium representative reactions. Determination of the solubility product of silver acetate. The measurement of pH. Chemical equilibrium. Oxidising and reducing power. Quantitative titration.

**Bibliography**

J.C. Kotz, P. Treichel Jr., Chemistry and Chemical Reactivity, 3<sup>o</sup> ed., Saunders College Publ. , 1996

**Evaluation criteria**

For grading policy, see: Regimento Geral de Graduação, Seção I – Normas Gerais, Capítulo V – Da Avaliação do Aluno na Disciplina. Students are required to attend 75 % of the lectures. For further details, see: Regimento Geral de Graduação, capítulo VI, seção X, artigo 72.