Code: **QG551**

Name: **Didática e Metodologia do Ensino de Química**

Name in English: **Didactics and Methodology of Chemistry Teaching**

Name in Spanish: **Didáctica e Metodología de la Enseñanza de Química**

Subject type: **Weekly**

Approval Type: **Grade and Frequency**

Characteristic: **Regular**

Frequency: **75%**

Period Type / Offering period: **Semestral / 1st period – odd periods**

Requires Final Exam: **Yes**

Vectors

T	L	P	O	PE	OE	SL	WEEKS	CREDITS
2	**-**	**2**	**4**	**-**	**-**	**4**	**15**	**8**

Occurrence on curriculum: **05**

Pre requirement: **EL212 + EL511 + EL683 + EP152 + QG108 + QG109**

Summary: Methodological strategies for teaching chemistry with theoretical, historical, phenomenological, and representational approaches, including those focused on inclusive education. Investigative approaches, active methodologies, and assistive techniques. Current trends in chemistry teaching. Strategies for inclusive teaching in chemistry. Didactic sequences in chemistry teaching: curriculum, planning, action, and evaluation of professional practice. The role of reflective practice. Articulation between theory and practice in initial teacher education.

Program:

Methodological strategies for teaching chemistry with theoretical, historical, phenomenological, and representational approaches, including those focused on inclusive education. Investigative approaches, active methodologies, and assistive techniques. Current trends in chemistry teaching. Strategies for inclusive teaching in chemistry. Didactic sequences in chemistry teaching: curriculum, planning, action, and evaluation of professional practice. The role of reflective practice. Articulation between theory and practice in initial teacher education.

Basic Bibliography

1) DELIZOICOV, Demétrio**. Ensino de Ciências: fundamentos e métodos** – São Paulo: Cortez, 2002.
2) LIBÂNEO, J. C. **Didática**. – São Paulo: Cortez, 2008.
3) LUCKESI, C.; **Avaliação da Aprendizagem Escolar: Estudos e Proposições**, 22ºedição, São Paulo: Cortez Editora

Supplementary Bibliography

1) LOPES, R. M. et al. **Aprendizagem baseada em problemas: uma experiência no ensino de química toxicológica.** Química Nova, Vol. 34, No. 7, 1275-1280, 2011
2) BROOKS, J.G.; BROOKS, M.G**. Tornando-se um professor construtivista. Construtivismo em sala de aula**. Porto Alegre: Artes Médicas, 1997.
3) CHARLOT, Bernard. **Da relação com o saber às práticas educativas**. São Paulo: Cortez, 2013
4) SÁ, L. P.; QUEIROZ, S. L. **Estudos de caso no ensino de química**. Campinas: Editora Átomo, 2009.
5) SANTOS, W. L. P.; SCHNETZLER, R. P. **Educação em química: compromisso com a cidadania**. 3ª Edição. Ijuí: Unijuí, 2003.