

"Gheorghe Asachi" Technical University of Iasi, Romania



MASSIVE OPEN ONLINE COURSES (MOOC_s) WITH OPEN EDUCATIONAL RESOURCES FOR TOXICOLOGY LEARNING – DRUGS AND POLLUTANTS AS XENOBIOTICS

Ileana Manciulea¹, Anca Vasilescu², Stefano Girotti³, Luca Ferrari⁴, Michele Protti³, Laura Mercolini³, Lucia Dumitrescu¹, Dana Perniu¹, Camelia Draghici^{1*}

Abstract

Due to the lack of European Massive Open Online Courses (MOOCs) in the field of the Toxicology and the major differences in the styles of teaching and learning of this important subject in amongst various European life science-oriented institutions, the European Erasmus+ project "Learning Toxicology through Open Educational Resources (TOX-OER)" was developed and implemented. Considering the complexity and heterogeneity of the toxicology field, the TOX-OER project main objective was to develop and share toxicology-related knowledge and skills among students/ earners from seven countries, which promote the internationalization of Higher Education Institutions in Europe but also in countries from other continents. The project was coordinated by Universidad de Salamanca (Spain), and the partners were: Space Research and Technology Institute (Bulgaria), Univerzita Karlova V Praze (Czech Republic), South-Eastern Finland University of Applied Sciences (Finland), Università di Bologna (Italy), Universidade do Porto (Portugal) and Universitatea Transilvania din Brasov (Romania). One of the goals/ objectives of the project is the dissemination, popularizing the information and reaching potentially interested people who can benefit from the offered courses. The aim of this paper is to present and analyze part of the TOX-OER's outcomes developed by the project's partnership, especially the modules/ topics related to the drugs, gaseous and persistent organic pollutants, as the principal groups of xenobiotics.

Key words: drugs, massive open online courses, open educational resources, pollutants, toxicology

Received: July, 2018; Revised final: March, 2019; Accepted: May, 2019; Published in final edited form: August, 2019

¹ Transilvania Universityof Brasov, Department of Product Design, Mechatronics and Environment, 29 Eroilor Blv, 500036 Brasov, Romania

²Transilvania University of Brasov, Department of Mathematics and Computer Science, Romania

³Alma Mater Studiorum – Università di Bologna, Department of Pharmacy and Biotechnology, Italy

⁴ Alma Mater Studiorum – Università di Bologna, Department of Education Studies 'G.M. Bertin', Italy

_

^{*} Author to whom all correspondence should be addressed: e-mail: c.draghici@unitbv.ro, Phone: +40-723779696; Fax: +40-268473473.